

Arizona State University

Course Catalog Archive

2015-2016



This document provides an archival record of the course catalog offered during the 2015-2016 academic year. It is a printable option of the online course catalog for accreditation organizations, agencies and university offices for data collection, evaluation purposes and referencing. The courses presented in this archive may no longer be offered. For current course information and offerings, refer to the online version of the course catalog.

For inquiries or questions please contact academic.catalog@asu.edu.

Classification of Courses

course numbering system

Lower-Division Courses

Lower-division courses, numbered from 100 to 299, are designed primarily for freshmen and sophomores. Certain classes are closed to freshmen who lack the designated prerequisites or whose majors are outside the units offering the courses. This information is available in the course catalog [1] or from the student's academic advisor.

Upper-Division Courses

Upper-division courses, numbered from 300 to 499, are designed primarily for juniors and seniors. Prerequisites and other restrictions should be noted before registration. Courses at the 400 level apply to graduate degree requirements for some graduate programs when approved by Graduate Education.

Graduate-Level Courses

Graduate-level courses, numbered from 500 to 799, are designed primarily for graduate students. However, an upper-division undergraduate student may enroll in courses numbered 500-599 with the approval of the student's advisor, course instructor, department chair and dean of the college in which a course is offered. If such a course does not meet an undergraduate graduation requirement, it may be eligible for use in a future graduate program on the same basis as work taken by a nondegree graduate student. See graduate credits earned by undergraduate students [2].

omnibus courses

Omnibus numbers are used for courses offered on an experimental or tutorial basis or for courses in which the content is new or periodically changes. Academic units use their prefixes with omnibus course numbers. The general nature of the work required for a particular omnibus course is consistent from unit to unit, but subject matter varies. Omnibus courses are often offered for a variable number of credit hours.

Within the academic catalog and course catalog, abbreviations are frequently used with a colon to introduce specific omnibus course topics (e.g., MGT 494 ST: Cultural Factors in International Business). See the omnibus course abbreviations.

| Omnibus Course Abbreviations | | |
|------------------------------|-------|--------|
| Abbreviation | Title | Number |

| | | |
|-----|-------------------------|-------------------------|
| AP | Applied Project | 593, 693, 793 |
| CW | Conference and Workshop | 594 |
| FW | Fieldwork | 583, 683, 783 |
| FYS | First-Year Seminar | 191 |
| HC | Honors Colloquium | 497 |
| I | Internship | 484, 584, 684, 784 |
| P | Practicum | 580, 680, 780 |
| PS | Pro-Seminar | 498 |
| R | Research | 592, 692, 792 |
| RC | Reading and Conference | 590, 690, 790 |
| RM | Research Methods | 500, 600, 700 |
| S | Seminar | 591, 691, 791 |
| ST | Special Topics | 194, 294, 394, 494, 598 |

Omnibus Undergraduate Courses

191 First-Year Seminar (1–3)

Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended.

194, 294, 394, 494 Special Topics (1–4)

Covers topics of immediate or special interest to a faculty member and students.

484 Internship (1–12)

Structured practical experience following a contract or plan, supervised by faculty and practitioners.

498 Pro-Seminar (1–7)

Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required.

499 Individualized Instruction (1–3)

Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required.

Honors Courses The courses listed as 298 and 492 Honors Directed Study, 493 Honors Thesis, 497 Honors Colloquium, and all courses with the HON prefix are reserved for students in Barrett, the Honors College. These courses range from one to six credit hours. Consulting with an honors advisor before enrolling is recommended.

Omnibus Graduate Courses

500, 600, 700 Research Methods (1–12)

Course on research methods in a specific discipline.

580, 680, 780 Practicum (1–12)

Structured practical experience in a professional program, supervised by a practitioner or faculty member with whom the student works closely.

583, 683, 783 Fieldwork (1–12)

Structured, supervised field experience in a field science or other discipline requiring experience in field techniques.

584, 684, 784 Internship (1–12)

Structured practical experience that follows a contract or plan, supervised by faculty and practitioners.

590, 690, 790 Reading and Conference (1–12)

Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic or writing a literature review of a topic.

591, 691, 791 Seminar (1–12)

A small class emphasizing discussion, presentations by students and written research papers.

592, 692 Research (1–12)

Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript.

593, 693, 793 Applied Project (1–12)

Preparation of a supervised applied project that is a graduation requirement in some professional majors.

594 Conference and Workshop (1–12)

Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals.

595, 695, 795 Continuing Registration (1)

Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded and no grade is assigned.

598 Special Topics (1–4)

Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand).

599 Thesis (1–12)

Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing.

792 Research (1–15)

Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript.

799 Dissertation (1–15)

Supervised research focused on preparation of dissertation, including literature review, research, data collection, analysis and writing.

The preceding courses are described in Graduate Education announcements and are also available in the respective departments. Under special circumstances, at the dean's request and through the approval of the executive vice president and provost of the university, arrangements may be made to increase the standard credit hours of credit.

Visiting Student Program

The numbers 597, 697 and 797 in the LAW prefix have been reserved for the visiting student program in the Sandra Day O'Connor College of Law.

Study Abroad Programs

Courses with the prefix SAO are reserved for participants in partnership and exchange study abroad programs through the Study Abroad Office. This is a placeholder course that remains on the student's academic record until the student's record is updated by SAO following the completion of the student's study abroad program. This course will be dropped and will be replaced with the ASU courses, credits, and grades equivalent to the course work completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 credits for undergraduate students and nine credits for graduate students during the fall and spring semesters, or one to six hours during the summer session). Students participating in an SAO partnership program must register for the subtopic "SAO: Study Abroad Program;" participants in an SAO exchange program must register for the subtopic "SAO: Exchange Program." Note: The SAO placeholder course is not an indication of the level of course work or the total number of credits the student may complete abroad.

Source URL: https://catalog.asu.edu/course_classification

Links:

[1] <https://www.asu.edu/go/classsearch>

[2] http://catalog.asu.edu/course_load

| Course Prefix | Description |
|----------------------|----------------------------------------------------|
| AAD | Architectural Administration and Management |
| ABS | Applied Biological Sciences |
| ACC | Accountancy |
| ACO | Applied Computing |
| ACT | Actuarial Sciences |
| ADE | Architectural Design and Technology Studios |
| AEC | American English and Culture Program |
| AEE | Aerospace Engineering |
| AEP | Applied Ethics and the Professions |
| AES | Aerospace Studies |
| AET | Aeronautical Engineering Technology |
| AFR | African and African American Studies |
| AGB | Agribusiness |
| AIS | American Indian Studies |
| ALA | Architecture and Landscape Architecture |
| ALD | Aging and Lifespan Development |
| ALT | Alternative Energy Technologies |
| AME | Arts, Media, and Engineering |
| AML | Applied Mathematics for the Life & Social Sciences |
| AMS | American Studies |
| AMT | Aeronautical Management Technology |
| ANB | Animal Behavior |
| ANP | Environmental Analysis and Programming |
| APA | Asian Pacific American Studies |
| APH | Architectural Philosophy and History |
| APL | Applied Linguistics |
| APM | Applied Mathematics |
| AR | AR |
| ARA | Art Auxiliary |
| ARB | Arabic |
| ARE | Art Education |
| ARP | Architecture Professional Studies |
| ARS | Art History |
| ART | Art |
| ASB | Anthropology (Social and Behavioral) |
| ASC | Applied Science Core |
| ASE | Analysis and Systems |
| ASM | Anthropology (Science and Mathematics) |
| AST | Astronomy |
| ASU | ASU |
| ATC | Air Traffic Control |
| ATE | Architecture and Landscape Architecture |
| AVC | Architectural Communication |
| BCH | Biochemistry |
| BCS | Serbo-Croatian |
| BDE | Biological Design |
| BIO | Biology |
| BIS | Bachelor of Interdisciplinary Studies |

| Course Prefix | Description |
|----------------------|-------------------------------------|
| BLE | Bilingual Education |
| BMD | Biomedical Diagnostics |
| BME | Bioengineering |
| BMI | Biomedical Informatics |
| BMY | Biomimicry |
| BUA | Business Administration |
| BUE | Business Education |
| BUS | Business |
| CBS | Computational Biosciences |
| CCS | Chicana and Chicano Studies |
| CDE | Child Development |
| CDH | Computational Digital Humanities |
| CED | Counselor Education |
| CEE | Civil and Environmental Engineering |
| CEN | Computer Engineering |
| CHE | Chemical Engineering |
| CHI | Chinese |
| CHM | Chemistry |
| CHP | Community Health Practice |
| CHS | College of Health Solutions |
| CIM | Concrete Industry Management |
| CIS | Computer Information Systems |
| CMN | Communication Studies |
| CNE | Construction Engineering |
| COE | College of Education |
| COM | Communication |
| CON | Construction |
| CPI | Computing & Informatics |
| CPP | College of Public Programs |
| CPY | Counseling Psychology |
| CRD | Community Resources and Development |
| CRJ | Criminology and Criminal Justice |
| CSE | Computer Science and Engineering |
| CSM | Community Sports Management |
| CST | Computing Studies |
| CTI | Technology & Innovation |
| DAH | Dance History |
| DAN | Dance |
| DBA | Doctor of Business Administration |
| DCE | Dance |
| DCI | Curriculum and Instruction |
| DNP | Doctor of Nursing Practice |
| DSC | Design |
| EA | Education |
| EAC | Early Childhood East |
| ECD | Early Childhood Education |
| ECN | Economics |
| ECS | Early Childhood Special Education |

| Course Prefix | Description |
|----------------------|---------------------------------------------|
| ECT | Early Childhood Teaching and Leadership |
| EDA | Education Administration and Supervision |
| EDP | Educational Psychology |
| EDS | Environmental Design |
| EDT | Educational Technology |
| EED | Elementary Education |
| EEE | Electrical Engineering |
| EET | Electronics Engineering Technology |
| EGR | Engineering |
| ELL | English as a Second Language |
| ELS | Environmental Life Sciences |
| EMS | Executive Sustainability Leadership |
| EN | English |
| ENE | Engineering Education |
| ENG | English |
| ENV | Environmental Science |
| EPA | Education Policy Analysis |
| EPD | Environmental Design and Planning |
| ERM | Environmental Resource Management |
| ESS | Environmental Social Science |
| EST | Electronic Systems Technology |
| ETH | Ethnic Studies |
| EVO | Evolutionary Biology |
| EXW | Exercise and Wellness |
| FAS | Family Studies |
| FIN | Finance |
| FMP | Film and Media Production |
| FMS | Film and Media Studies |
| FOR | Forensics |
| FRE | French |
| FSE | Fulton School of Engineering |
| GBL | Global Launch |
| GCU | Cultural Geography |
| GER | German |
| GIS | Geographic Information Science |
| GIT | Graphic Information Technology |
| GLG | Geological Sciences |
| GPH | Physical Geography |
| GRA | Graphic Design |
| GRD | Graduate Education |
| GRK | Ancient Greek |
| GTD | Global Technology and Development |
| HCD | Science of Health Care Delivery |
| HCI | Healthcare Innovation |
| HCR | Health Care Related |
| HDA | Herberger Institute for Design and the Arts |
| HEB | Hebrew |
| HED | Higher and Postsecondary Education |

| Course Prefix | Description |
|----------------------|----------------------------------------------------|
| HES | Health Science |
| HHE | Healthcare and Healing Environments |
| HIN | Hindi Studies |
| HON | Honors |
| HPS | History and Philosophy of Science |
| HRC | Humanities, Arts & Cultural Studies |
| HSC | Health Sciences |
| HSD | Human and Social Dimensions Science and Technology |
| HSM | Health Sector Management |
| HST | History |
| HUD | Housing and Urban Development |
| HUM | Humanities |
| IAP | Interdisciplinary Arts and Performance |
| IAS | Integrative Studies |
| IBC | Integrated Behavioral Care |
| IDN | Indonesian |
| IED | Indian Education |
| IEE | Industrial Engineering |
| IFT | Information Technology |
| IMD | Instructional Media |
| IND | Industrial Design |
| INT | Interior Design |
| ITA | Italian |
| JAC | Joint Admission Continuous Enrollment |
| JHR | Social Justice and Human Rights |
| JMC | Journalism and Mass Communication |
| JPN | Japanese |
| JST | Jewish Studies |
| JUS | Justice Studies |
| KIN | Kinesiology |
| KOR | Korean |
| LAA | Landscape Architectural Administration |
| LAP | Landscape Architecture Professional Studies |
| LAS | Latin American Studies |
| LAT | Latin |
| LAW | Law |
| LDE | Landscape Architectural Design&Technology Studies |
| LES | Legal and Ethical Studies |
| LIA | Liberal Arts and Sciences |
| LIN | Linguistics |
| LIS | Library Science |
| LNP | Landscape Analysis and Programming |
| LPH | Landscape Architectural Philosophy and History |
| LSC | Life Sciences |
| LSE | Learning Sciences |
| LTC | Landscape Architectural Technology |
| MAE | Mechanical and Aerospace Engineering |
| MAK | Macedonian |

| Course Prefix | Description |
|----------------------|---------------------------------------------------|
| MAS | Masters of Arts in Interdisciplinary Studies |
| MAT | Mathematics |
| MBB | Molecular Biosciences/Biotechnology |
| MCB | Molecular and Cellular Biology |
| MCE | Multicultural Education |
| MCO | Mass Communication |
| MDC | Music and Digital Culture |
| MDL | Medical Laboratory Science |
| MED | Medical Studies |
| MEE | Mechanical Engineering |
| MET | Mechanical & Manufacturing Engineering Technology |
| MGT | Management |
| MHI | Master of Healthcare Innovation |
| MHL | Music History/Literature |
| MIC | Microbiology |
| MIS | Military Science |
| MKT | Marketing |
| MLS | Master of Liberal Studies |
| MND | Mandarin Chinese |
| MPH | Masters in Public Health |
| MSA | Modern Standard Arabic |
| MSE | Materials Science and Engineering |
| MSI | Music Scholarly Inquiry |
| MTC | Music Theory and Composition |
| MTE | Mathematics Education |
| MUD | Urban Design |
| MUE | Music Education |
| MUP | Music Performance |
| MUS | Music |
| NAN | Nanoscience |
| NAV | Naval Science |
| NEU | Neuroscience |
| NLM | Nonprofit Leadership and Management |
| NTR | Nutrition |
| NUR | Nursing |
| OBS | Obesity Prevention and Management |
| OGL | Organizational Leadership |
| OMT | Operations Management Technology |
| OPM | Operations and Production Management |
| PAF | Public Affairs |
| PBH | Public Health |
| PE | PE ACTIVITY |
| PGM | Professional Golf Management |
| PGV | Public Policy and Government |
| PHI | Philosophy |
| PHL | Philosophy |
| PHS | Physical Sciences |
| PHY | Physics |

| Course Prefix | Description |
|----------------------|----------------------------------------------------|
| PLA | Landscape Architecture |
| PLB | Plant Biology |
| PLC | Polish Languages and Culture |
| POR | Portuguese |
| POS | Political Science |
| PPE | Physical Education East |
| PRM | Parks and Recreation Management |
| PSB | Psychology Behavior Analysis |
| PSY | Psychology |
| PUB | Scholarly Publishing |
| PUP | Urban and Environmental Planning |
| QBA | Quantitative Business Analysis |
| RDG | Reading Education |
| RE | Recreation Mngt & Tourism |
| REA | Real Estate |
| RED | Real Estate Development |
| REL | Religious Studies |
| ROM | Romanian |
| RTM | Recreation and Tourism Management |
| RUS | Russian |
| SAO | Study Abroad Office |
| SBS | Social and Behavioral Sciences |
| SCM | Supply Chain Management |
| SCN | Science Education |
| SEC | Solar Energy Engineering & Commercialization |
| SED | Secondary Education |
| SEM | Science and Engineering of Materials |
| SER | Software Engineering |
| SES | Earth and Space Exploration |
| SET | Security Engineering Technology |
| SGS | School of Global Studies |
| SHS | Speech and Hearing Science |
| SLB | Sports Law and Business |
| SLC | School of International Letters and Cultures |
| SLV | Slavic |
| SMC | Simulation, Modeling and Applied Cognitive Science |
| SOC | Sociology |
| SOS | School of Sustainability |
| SP | Spanish |
| SPA | Spanish |
| SPE | Special Education |
| SPF | Social and Philosophical Foundations |
| SSH | Social Science and Health |
| SST | Studies in Social Transformation |
| STC | Social Technologies |
| STM | Science, Technology, Engineering and Mathematics |
| STP | Statistics and Probability |
| STS | Science, Technology, and Society |

| Course Prefix | Description |
|----------------------|------------------------------------------------|
| SWG | Social Work (Graduate) |
| SWU | Social Work (Undergraduate) |
| TBX | Thunderbird Teach-Out |
| TCL | Transborder Chicana/o and Latina |
| TDM | Tourism Development and Management |
| TEL | Teacher Education and Leadership |
| TEM | Technological Entrepreneurship and Management |
| TGM | Thunderbird School of Global Management |
| THA | Thai |
| THE | Theatre |
| THF | School of Theatre and Film |
| THP | Theatre Performance and Production |
| TMC | Technology Management Core |
| TSS | School of Transborder Studies |
| TWC | Multimedia Writing and Technical Communication |
| UET | Microelectronics Engineering Technology |
| UNI | University |
| URB | Urban and Metropolitan Studies |
| USL | University Service Learning |
| VTN | Vietnamese |
| WAC | Writing Across the Curriculum |
| WPC | W.P. Carey School of Business |
| WST | Women's Studies |
| YDL | Youth Development Leadership |

| Course Component | Description |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Individualized Instruction (IND) | A class in which an individual student is provided an opportunity for original study or investigation in a major or field of specialization on a more autonomous basis. Normally a contract or plan is used and supervised by faculty and/or practitioners. |
| Integrated Lecture/Lab (LEL) | Integrated lecture/lab is a class that has some lecture and some hands-on components but do not require a separate time like a traditional lab. |
| Laboratory (LAB) | The hands-on, workshop component of a class usually held in a laboratory. The laboratory time is separate from the lecture although it is often associated to a lecture(s). |
| Lecture (LEC) | A traditional method of instruction in which students are taught a subject by a member of the faculty. |
| Practicum (PRA) | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. Internships and student teaching fit into this category. These classes are often held off campus at a professional location. |
| ProMod (PRO) | In ProMod courses, the role of lectures is deemphasized in favor of learning based on projects. The learning is driven by the needs of the project, not by predetermined lecture topics. Students will go where the questions take them, leading to an individualized exploration for the issues at hand. |
| Recitation (REC) | Recitations are small interactional meetings that combine formal presentations, review, and interaction between the students and an instructor. These are small interactional meetings and are usually combined with a lecture as the primary component. Recitations are often lead by teaching assistants (TAs) or graduate assistants (GAs) to supplement a lecture. TAs/GAs review the lecture, expand on the concepts, and usually allow for question/answer time. |
| Research (RSC) | Under the supervision of a faculty member or group of faculty, student conducts research that is expected to lead to a specific project such as dissertation, thesis, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. |
| Seminar (SEM) | A small class emphasizing discussion, presentations by students, and written research papers. |
| Studio (STO) | A hands-on workshop component of design and the arts courses. |

| Grading Option | Description |
|-----------------------|--------------------------------------------|
| AUD | Audit |
| CNV | Conversion |
| ELG | Enhanced Learning Grading Basis |
| GNA | Graded with No Audit |
| GRD | Graded |
| NOG | No Grade Associated |
| OP2 | Student Option - Grade, Z or Audit |
| OP4 | Student Option – P/F/Z or Audit |
| OP6 | Student Option – Standard Grading or Audit |
| OPT | Student Option – Standard Grading or Audit |
| YGB | Y (Satisfactory) Grading Basis |
| Z1 | Standard Grading with Z Option |
| Z2 | Pass/Fail with Z Option |
| Z3 | Continuing registration |

Summer 2015

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------|
| AAD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AAD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| AAD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design MS student |
| AAD | 552 | Architectural Management II | Organizational, human performance, and market influences on architecture firms and projects. Readings, case studies, and analysis of managerial problems and solutions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Building Design MS, Master of Architecture, Master of Urban Design or Master of Landscape Architecture student |
| AAD | 555 | Architect as Developer | Development building, real estate, construction funding, land acquisition, and the sources for capital. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ABS | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only ABS 130 or BIO 130 |
| ABS | 207 | Applied Plant Taxonomy | Introduces identification of vascular plants emphasizing seed plants. Surveys seed plant families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (BIO 188); BIO 182 (BIO 187) |
| ABS | 225 | Soils | Fundamental properties of soils and their relations to plant growth, nutrition of man and animals, and environmental quality. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Prerequisite(s): CHM 101 or CHM 113 |
| ABS | 226 | Soils Laboratory | Selected exercises to broaden the background and understanding of basic soil principles. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-Requisite: ERM (ABS) 225 |
| ABS | 260 | Fundamentals of Sustainable Horticulture | Principles and practices of horticulture, emphasizing development, growth, and propagation of horticultural plants and environmental factors that affect these processes. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| ABS | 270 | Sustainable Biological Systems | Ecological foundations of sustainable biological systems, anthropogenic impacts on ecosystem structure and function, and ecological risk assessment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 271 | Veterinary Medicine Today | Introduces the role of the veterinarian as related to the fields of food supply and veterinary medicine. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 274 | Introduction to Wildlife Management | Managing wildlife in the Southwest, including life histories of small game, fur bearers, big game, and selected nongame specials. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |

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| ABS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 301 | Technology and Biology | Demonstrations of a broad range of innovative technologies in molecular biology, cellular and organismal biology, horticulture, and wildlife and restoration ecology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 302 | Ethical and Policy Issues in Biology | Policy environment and ethics in the practice of biology. Covers ethical reasoning, policy formulation, and regulatory agencies with examples from biotechnology and the environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 311 | Molecular and Cellular Biology | Overview of the biology of the cell; emphasizes structure and function of biomolecules within the cell and their applications associated with recombinant DNA technology, genetic engineering, plant and agriculture biotechnology, and human pharmaceutical development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or 188) ; BIO 182 (or 187) with C or better |
| ABS | 312 | Structure and Function | Surveys structural and functional attributes of plant and animals of particular importance in the applied biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |
| ABS | 314 | Applied Plant Physiology | Understanding control of plant growth and developmental processes through innovated technologies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182 |
| ABS | 350 | Applied Statistics | Statistical methods with applications in the biological sciences and natural resource management. Uses computers and the Internet. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ASC 315, MAT 117, 142 or other course meeting General Studies MA requirement with C or better |
| ABS | 355 | Ecology and Adaptations of Vertebrates | Evolution, classification systematics, diversity, anatomical and physiological adaptations anatomy, and physiology, specializations and conservation status of the vertebrates. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 182 (or BIO187) , and BIO 181 (or BIO188) |
| ABS | 360 | Southwest Home Gardening | Multimedia course for nonmajors surveying contemporary topics in Southwest home horticulture, including landscaping, flower and vegetable gardening, citriculture, interiorscaping, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 362 | Landscape Plants and Design | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 260 |
| ABS | 363 | Sustainable Landscape Practice | Landscape technologies and practices including landscape design theory, job costing and bidding, sprinkler and drip irrigation design, landscape installation, landscape valuation techniques, landscape ordinances, and maintenance practices of commercial and residential landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisites: ABS 260; Credit is allowed for only ABS or PGM 363 |
| ABS | 364 | Urban Forestry | Care, maintenance, and valuation of the urban forest, including public and private landscape codes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 368 | Plant Propagation | Theory and application of sexual and asexual propagation techniques. Considers plant materials used both for urban horticulture and ecological restoration applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 370 | Ecology | Interactions between organisms and their environments; structure and dynamics of populations, communities, ecosystems, and landscapes, with emphasis on vegetation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: BIO 181 |
| ABS | 376 | Wildlife Ecology | Examines ecological principles underlying wildlife population dynamics with emphasis on physiology, genetics, nutrition, and habitat factors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisites: ABS 274; ABS 370 |
| ABS | 378 | Animal Nutrition | Principles of nutrient metabolism in animal species; emphasizes understanding the interaction of animals with their environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182; CHM 101 or CHM 113 |
| ABS | 380 | Restoration and Wildlife Plants | Important wildland plants, including invasive and endangered species, wildlife food species, and species used for ecosystem restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 207 |
| ABS | 381 | Natural Resources Policy | Policies and regulations affecting management of natural resources, with emphases on wildlife and ecological restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 384 | Natural Resources Measurements | Inventory, sampling and monitoring techniques of natural resources. Data evaluation and interpretation as related to management, restoration and conservation needs of natural resources. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 401 | Intermediate Statistics | Analysis of variance, multiple comparisons, multiple regression. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 425 | Soil Classification and Management | Principles of soil genesis, morphology, and classification. Presents management and conservation practices. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ETM 225 |
| ABS | 430 | Watershed Management | Hydrologic, physical, biological, and ecological principles applied to watershed management. Impact of ecosystem manipulations on water yield and quality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 434 | Soil Ecology | Soils viewed in an ecosystem context, soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370 or BIO 320; Credit is allowed for only ABS 434 or BIO 418 |
| ABS | 435 | Applied Systems Ecology | Simulation modeling as a tool to study ecological processes and human impact on ecosystems and organisms. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370, ABS 350 (or STP 420) |
| ABS | 440 | Ecological Restoration Techniques | Techniques for ecological restoration, riparian and wetland restoration, and monitoring restoration success. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisite: ABS 370; Credit is allowed for only ETM 440 or ASB 598 (Ecological Restoration Techniques) |
| ABS | 441 | Ecological Restoration Practicum | Field experience in the evaluation and monitoring of implemented ecological restoration projects. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: ABS 440 |
| ABS | 460 | Organic Gardening | Applies principles and practices of organic gardening in the low desert, including environmental impacts of modern food production. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 462 | Greenhouse/Nursery Management | Greenhouse structures, environment, and nursery operations. Includes irrigation, nutrition, and other principles relative to production of nursery crops. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 260 |

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| ABS | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 465 | Senior Enterprise Project | Selection and completion of an urban horticulture project with faculty advisor approval related to the field of study. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisite: Senior standing |
| ABS | 470 | Life History of Mammals | Evolution, classification, environmental, anatomical and physiological adaptations, ecology, and conservation of mammals worldwide. Emphasis on the identification, habitat relationships, conservation, and management techniques of Arizona and select North American mammals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 |
| ABS | 472 | Applied Herpetology | Systematics, evolution, ecology and life history of amphibians and reptiles emphasizing wildlife management methodologies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 or BIO 370; Credit is allowed for only ABS 472 or 498 (Applied Herpetology) |
| ABS | 474 | Riparian Ecosystem Management | Management principles of riparian ecosystems based on fluvial geomorphological and ecological concepts. Discusses human impacts to riparian ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 475 | Habitat Management for Small Wildlife | Habitat management considerations and practices for small game and nongame wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 376 |
| ABS | 476 | Big Game Habitat Management | Habitat management considerations and practices for big game wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum junior standing |
| ABS | 479 | Ecosystem Management and Planning | Principles of ecosystem management, with emphasis on economic and policy constraints on the planning process. Risk assessment and management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: Senior standing |
| ABS | 481 | Riparian and Wetland Restoration | Principles and problems in the restoration of degraded riparian and wetland ecosystems. Construction of wetlands. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ABS 370 |
| ABS | 482 | Ecology and Planning for Restoration | Ecological principles and resource planning processes applied to the restoration of degraded landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ETM 225; 440 |
| ABS | 483 | Restoration Planning Practicum | Field experience in ecological restoration techniques, selection of mitigation techniques, and implementation planning. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | Pre/Co-requisite: ETM 482 |
| ABS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| ABS | 485 | GIS in Natural Resources | Principles of Geographic Information Systems (GIS) utilized in natural resource management. Use of computers for spatial analysis of natural resources. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 350, STP 420, EGR 280 or PSY 230 |
| ABS | 486 | Introduction to Remote Sensing | Remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. Not for graduate credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): minimum 45 hours |
| ABS | 489 | Undergraduate Research | Undergraduate research under the supervision of an applied biological sciences faculty member. | N | RSC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| ABS | 490 | Applied Biological Sciences Seminar | Current literature and significant developments related to applications of the biological sciences. May be repeated for credit. | N | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Senior standing |
| ABS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ABS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ABS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| ABS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ABS | 540 | Plant Responses to Environmental Stresses | Reaction of plants to environmental stresses: aerial pollutants, fire, herbivores, floods, mechanical treatments, pesticides, and soil amendments. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 541 | Advanced Rangeland Ecosystem Management | Combines the principles of ecology, planning and restoration in the application of rangeland ecosystem management. Studies fundamental topics such as range plant physiology, range plant ecology, rangeland stocking-rates and grazing systems in considering management practices for rangeland ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: Degree- or non-degree seeking graduate; Credit is allowed for only ERM 541 or ABS 598 (Adv Rangeland Ecosystem Management) |
| ABS | 542 | Management of Fire Adapted Ecosystems | Fire adapted ecosystems which evolved with high-frequency and low-intensity fires now support a range of regimes from no fire to uncharacteristically large and intense fires, causing a concern about the current and future role of wildland fire as well as forest and rangeland health. Explores management considerations and techniques for reintroducing fire to these ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ABS 598 (Fire Ecology), or ERM 542 |
| ABS | 550 | Vegetation Dynamics | Dynamics of vegetation linking physiological, population, and community ecology. Collection and analysis of vegetation data. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 551 | Advanced Environmental Analysis | Advanced statistical procedures and experimental design for the biological sciences. Techniques for analyzing data that do not meet statistical assumptions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 553 | Riparian Ecology | Review of recent literature, developments, and methods related to riparian ecology. Applies soil and landscape ecology to riparian systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ABS | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate (Degree and non-degree) students; Credit is allowed for only ABS, BIO 560 or MAT 561 |
| ABS | 570 | Advanced Animal Nutrition | Metabolic and physiological interactions of nutrients in wild and domesticated animals consuming natural feeds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 586 | Remote Sensing in Environmental Resources | Principles and application of remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 598 | Special Topics | Topical courses not offered in regular course rotation-e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | | Wildlife Dynamics | Explores major concepts in population and community ecology with an emphasis on their application to the study and management of wildlife species. Explores the theory and sometimes controversial nature of these concepts in the form of lectures and discussions. Instructor and student workshops and oral presentations of student research. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ERM 550 ABS 598 (Wildlife Dynamics) or ETM 598 (Wildlife Population Ecology) |
| ACC | 101 | Accountancy LEAP Program | The Leadership, Ethics, Accountability & Professionalism (LEAP) program aims to ensure a successful transition from high school to college and, ultimately, one's career. Based on the hallmarks of the accounting profession, provides the tools, resources, and expectations to succeed at ASU, W.P. Carey School of Business and the School of Accountancy. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1 | | |
| ACC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-3 | | |
| ACC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 231 | Uses of Accounting Information I | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: CIS 105 (or CIS 236) or CSE 110 if Engineering Management major. Not open to Pre-BIS or Interdisciplinary Studies majors |
| ACC | 232 | Financial Accounting I | Develops an understanding of the theory, concepts, principles and practices underlying preparation, interpretation, and use of external financial reports. Emphasizes interpreting the economic substance of events and transactions and their association with contemporaneous and prospective events, relationships, and outcomes. Gains understanding of the accounting information model and develops an ability to analyze and record business transactions and analyze basic financial statements. Meant for prospective accounting and finance majors (and students who plan current majors in these areas) and develops skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Accountancy or Finance majors; CIS 105, 220 or 236 with C or better |
| ACC | 241 | Uses of Accounting Information II | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LAB | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): ACC 231, 261 or 303 with C or better |

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| ACC | 242 | Managerial Accounting I | Develops an understanding of the theory, concepts, principles, and practices underlying managerial accounting. Emphasizes three functions managers must perform within their organizations: plan operations, control activities, and make decisions. Explains what accounting information is necessary, how to collect it, and how to interpret it. Meant for prospective accounting and finance majors and students who plan current majors in these areas and develop skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Open to W. P. Carey Accountancy and Finance majors; and others with School of Accountancy approval; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 261 | Honors Fundamentals of Financial Accounting | Covers basic financial accounting concepts and applications. Develops an understanding of the environment in which financial reporting choices are made. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; CIS 105 or CIS 220 or CIS 236 with C or better |
| ACC | 271 | Honors Fundamentals of Managerial Accounting | Covers basic managerial accounting concepts and applications. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 315 | Financial Accounting and Reporting | Accounting theory and practice related to uses of financial statements by external decision makers. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey BS or BA student (not open to Accountancy students); or non-bus student with min 2.5 ASU cum GPA, min 2.5 ASU bus GPA and 56 earned hrs; ACC 231 and ACC 241 with C or better |
| ACC | 316 | Mgmt Uses of Accounting | Uses of accounting information for managerial decision making, budgeting, and control. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey BS or BA student (not open to Accountancy students); or non-bus student with min 2.5 ASU cum GPA, min 2.5 ASU bus GPA and 56 earned hrs; ACC 241 with C or better |
| ACC | 326 | External Financial Reporting I | Theory, U.S. standards, and practice applicable to financial statements, revenue recognition, and assets. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Global Management Accountancy BS student OR be pursuing an Accountancy or Prof Accountancy certificate |
| ACC | 327 | External Financial Reporting II | Theory, U.S. standards, and practice applicable to equities, cash flow statement, earnings per share, leases, pensions, and other essential topics. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: School of Global Management and Leadership Accountancy student; ACC 326 with C or better |
| ACC | 336 | Cost Management and Control | Concepts and principles for product costing, planning and control, and internal decision making. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-Requisites: Global Management Accountancy BS student with Professional status OR be pursuing an Accountancy or Prof Accountancy certificate |
| ACC | 340 | External Reporting I | Financial accounting theory and practice related to external reporting. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W. P. Carey BS Accountancy or Finance BS student; Pre- or corequisite(s); FIN 300, 302 or 303 |
| ACC | 350 | Internal Reporting | Internal reporting systems for planning, control, and decision making. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 241, ACC 242 or ACC 271, AND ECN 221 or ECN 231 with C or better |
| ACC | 356 | Income Tax Accounting | Public policy concepts and rules of federal income tax for all taxpayers. Individual tax returns and use of tax software. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Global Management Accountancy BS student with Professional status OR be pursuing an Accountancy or Prof Accountancy certificate AND ACC 326 with C or better |
| ACC | 360 | Ethics for Professional Accountants | Addresses ethical obligations and responsibilities of professional accountants. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W. P. Carey BS Accountancy major |
| ACC | 361 | Accounting Technology | Use and understanding of a computerized accounting package and other software for accounting applications. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Global Management Accountancy BS student with Professional status OR be pursuing an Accountancy or Prof Accountancy certificate AND ACC 326 and 336 and 346 with C or better |
| ACC | 382 | Accounting and Financial Analysis | Introduces nonbusiness majors to financial accounting concepts related to operating, financing, investing, and ethical decisions. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Non-Business student; must not have previously earned credit in ACC 230, 231, 232, 240, 241, 242, 261, 271 or BUJ 381; min ASU cum GPA of 2.00 and min 56 total earned hours OR non-deg student with min ASU cum GPA of 2.00, OR grad student |
| ACC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 430 | Taxes and Business Decisions | Federal income taxation of sole proprietors, partnerships, corporations, fiduciaries, and individuals with an emphasis on tax consequences of business and investment decisions. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): W. P. Carey Accountancy BS student; ACC 340 with C or better; LES 305 with C or better |
| ACC | 440 | External Reporting II | Continuation of ACC 340 with emphasis on the recognition, research, and resolution of financial reporting issues. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 340 with C or better |
| ACC | 444 | Enterprise Process Analysis and Design | Addresses the major business processes of an enterprise, the impact of recent technological innovations and requisite internal controls. Advances an understanding of the current regulatory environment as it pertains to process controls. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Computer Info Systems BS student; ACC 241 (or 242 or 271) with C or better; ECN 221 with C or better; FOR CIS MAJORS: CIS 235 or 236 with C or better |
| ACC | 445 | Honors Enterprise Process Analysis and Design | Analysis and design of efficient and effective business processes. Emphasizes taking advantage of new information technologies to improve managerial decision making. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student AND Accountancy BS or Computer Info Systems BS student; ACC 241, 242 or 271 with C or better; ECN 221 or 231 with C or better |
| ACC | 450 | Principles of Auditing | Standards and procedures in auditing. Planning, evidence gathering and accumulation, and reporting. Ethical and legal considerations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS student; ACC 440 with C or better |
| ACC | 476 | External Auditing | Theory and standards underlying the attestation process. Topics include evidence gathering, analysis, reporting, and development of professional judgement skills. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Global Management Accountancy BS student OR Accountancy or Professional Accountancy Certificate; ACC 322 or 327 with C or better; ACC 346 or 347 with C or better |
| ACC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisites: W. P. Carey BS Accountancy major; 3.50 cumulative GPA; Minimum 72 hours; ACC 340, 350, 430, 440 and 450 with C or better |
| ACC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | L | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ACC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Accountancy BS student |
| ACC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-7 | L | Pre-requisite: Accountancy BS, Finance BS or Economics BS student |
| ACC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-3 | | Pre-requisite: Accountancy BS student |
| ACC | 502 | Financial Accounting | Contemporary financial accounting and reporting systems; emphasizes the interpretation and evaluation of a company's external financial reports. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 503 | Managerial Accounting | Managerial accounting concepts and procedures for internal reporting applied to the decision making activities of the professional managers. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 511 | Taxes and Business Strategy | Economic implications of selected management decisions involving application of federal income tax laws. Recognition of tax hazards and tax savings. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 512 | Advanced Auditing | Builds on the skills obtained in the beginning auditing (assurance) course and focuses on audit planning, risk assessment, evidence, and reporting procedures and fraud. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Master of Accounting student |
| ACC | 513 | Advanced Financial Accounting | Focuses on advanced financial accounting topics along with their application in the financial reporting process. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 561 | Auditing Through the Computer | Presents general IT audit concepts, terms, standards, practices, and current tools and techniques. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Graduate student in Accountancy & Applied Leadership |
| ACC | 571 | Taxation of Corporations and Shareholders | Tax aspects of the formation, operation, reorganization, and liquidation of corporations and the impact on shareholders. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 573 | Taxation of Pass-Through Entities | Tax aspects of the definition, formation, operation, liquidation, and termination of a partnership. Emphasizes tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 575 | Family Tax Planning and Wealth Transfer Taxation | Tax treatment of wealth transfers at death and during lifetime, with emphasis on tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 577 | Tax Research, Professional Responsibilities & Property Transactions | Federal tax issues and consequences, tax authority, property transactions and tax consequences of acquiring, holding and disposing of property. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major. Credit is allowed for only ACC 577 or ACC 591 (Tax Research, Professional Responsibilities & Property Transactions) |
| ACC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 582 | Information Security of Interorganizational Systems | Function and responsibility of the information security officer. Advanced topics in security methods and technology. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 585 | Performance Measurement and Advanced Managerial Accounting | Applies quantitative techniques to accounting problems. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Business Graduate student |
| ACC | 586 | Shareholder Value Creation and Financial Statement Analysis | Develops skills necessary to exploit financial reporting information in a business environment and appreciation of reporting issues faced by management. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 587 | Multi-Jurisdictional Taxation I | Multistate taxation and interplay between multistate tax issues and federal and state constitutional limitations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major |
| ACC | 588 | Professional Accounting Research | Applies the technical knowledge of accounting theory and principles developed in other academic courses through the use of "real life" case studies, where such knowledge and professional judgment is applied in resolving advanced accounting problems and issues. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Accountancy student |
| ACC | 589 | Multijurisdictional Tax II | Addresses the U.S. taxation of U.S. individuals and businesses that do business outside the U.S. as well as the U.S. taxation of foreign persons and tax treaties, allocation of income, foreign tax credits, and transfer pricing. Emphasizes planning related to some of the tax issues that commonly arise in cross-border businesses. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Taxation student |
| ACC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ACC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 596 | Accounting and Leadership Capstone Project | Case-based course dealing with the pragmatics of managing risk in a variety of business settings, including public accounting, consulting, and industry. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Graduate student in Accountancy & Applied Leadership |
| ACC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Business Administration (Accountancy) PHD student |
| ACC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACO | 100 | All About Data: Design, Query, and Visualization | Data modeling and design, spreadsheets, relational databases and querying, visualization and XML. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | |
| ACO | 101 | Introduction to Computer Science | Concepts of problem solving, structured and object-oriented programming in Java, fundamental algorithms, computer system concepts. Social and ethical responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: MAT117 with C or better OR Mathematics Placement Test with a score of 50% or higher |
| ACO | 102 | Object-Oriented Programming | Object-oriented programming using introductory algorithms and data structures. Overview of concepts in computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 101 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| ACO | 201 | Data Structures and Algorithms | Static and dynamic data structures, recursive and iterative sorting and searching, object-oriented design and programming, software design models and implementation/testing strategies, professional responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: ACO 102 and MAT 210 with C or better |
| ACO | 210 | Introduction to Systems Programming | Introduces operating systems as resource managers, processes, threads, memory allocation, file systems, protection, system calls, application program interfaces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 201 with C or better |
| ACO | 220 | Introduction to Database Systems | Introduces database management systems concepts. Entity-relationship and relational data models. Database design. Relational algebra, calculus, and SQL query languages. Query optimization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 210; MAT 243. Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| ACO | 320 | Database Systems | Entity-relationship and relational data models. Database design theory. Relational algebra, calculus and SQL query languages. Query optimization. XML fundamentals. Transactions, recovery and concurrency control. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: ACO 210; MAT 243. Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |

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| ACO | 321 | Database Development & Applications | Stored procedures and triggers. Security and authorization. Call-level interface. Database Web applications. Advanced topics. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 320 with C or better. Credit is allowed for only ACO 321 to CSE 414 |
| ACO | 330 | Computer Networks | Network architecture and protocols, principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 210 with C or better. Credit is allowed for only ACO 330 or CSE 434 |
| ACO | 331 | Network Design | Fundamental network design principles, internetworking design, network architectures, network management, traffic analysis, security management, case study and hands-on experiments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 330 with C or better |
| ACO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | N | RSC | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Prerequisite(s): ACO 102; minimum 30 hours |
| ACO | 420 | Large-scale Data Management | Modern technologies to manage, process and analyze big data. Data processing of large data sets with Map/Reduce. NoSQL data stores. NewSQL databases. Data visualization. Applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 421 | Data Mining and Warehousing | Introduces data mining from a database perspective, including classification, clustering, and association rules. Data warehousing methodologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 422 | XML and Databases | XML data model, schema specification and validation, querying, storage, indexing, and current research topics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 430 | Wireless Networks | Wireless transmission fundamentals, multiple access techniques, error detection and control, cellular concepts and systems, wireless LAN, performance analysis, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and STP 300 with C or better |
| ACO | 431 | Network Security | Digital threats and attacks, cryptography, confidentiality, authentication protocols, message integrity, security in network applications, intrusion detection, malicious software countermeasures, firewalls. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and MAT 243 with C or better |
| ACO | 432 | Distributed Systems | Distributed system models, distributed programming technique, clock synchronization, distributed snapshot, distributed mutual exclusion, concurrency control, fault tolerance, security, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210 and ACO 330 with C or better |
| ACO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| ACO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ACO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | L | |
| ACO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| ACT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 201 | Introduction to Elements and Techniques of Actuarial Science | Introduces important aspects of actuarial work. Exposes the development of actuarial techniques in the context of life insurance, casualty and property insurance, superannuation and investment. Develops problem-solving skills and gives basic tools for risk management and financial modeling, including the use of Excel spreadsheets for both, calculations and simulations. Shows how studies in related disciplines (such as accounting, demography, economics, statistics, computing and mathematics) are essential to the education of an actuary. Guest speakers from the industry share their knowledge and insight on how to become a successful actuary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: CIS 105 and MAT 270 with B or better |
| ACT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |

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| ACT | 310 | Mathematics of Finance | Prepares potential actuaries to master national exams. Provides an understanding of the fundamental concepts of financial mathematics and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use in: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting and valuing contingent cash flows. Topics include: mathematics of compound interest including annuities certain, amortization schedules, yields curves, sinking funds and bonds. Gives an introduction to financial instruments including derivatives and the concept of no-arbitrage as it relates to financial mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Pre-requisite: ACT 201 with B or better; MAT 270 with B or better, Credit is allowed for only ACT 310 or MAT 340 |
| ACT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 415 | Probability for Risk Management | Prepares potential actuaries to master national exams. Develops knowledge of the fundamental probability tools for quantitatively assessing risk. Topics include: introduction to probability concepts including definition of probability, independence, conditional probability, random variables, specific discrete and continuous probability distributions, multivariate random variables, moments and moment generating functions, functions of random variables, sampling distributions and central limit theorem. Emphasizes the application of these tools to problems encountered in actuarial science. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: ACT 310 with B or better; MAT 272 with B or better, Credit is allowed for only ACT 415 or STP 326 |
| ACT | 430 | Mathematics of Financial Derivatives | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. Topics include: option pricing, Black-Scholes formula, delta hedging, exotic options, Brownian motion, interest rate models and simulations. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: ACT 415 with B or better |
| ACT | 440 | Life Contingencies I | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: life tables, present value determination for life insurances and annuities, benefit premiums and reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: ACT 430 with B or better; MAT 343 with B or better |
| ACT | 441 | Life Contingencies II | Prepares potential actuaries to master the national exams. Develop the student's knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: multiple life functions, multiple decrement models and benefit reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 440 with C or better |
| ACT | 450 | Actuarial Models and Modeling I | Prepares potential actuaries to master the national exams. Helps student understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: survival, severity, frequency and aggregate models and their modifications. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: ACT 430 with B or better; STP 427 with B or better |
| ACT | 451 | Actuarial Models and Modeling II | Prepares potential actuaries to master the national exams. Helps students understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: construction and selection of parametric models, Bayesian estimation, credibility and simulation. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 450 with C or better |
| ACT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| ACT | 491 | Actuarial Exam Preparation Seminar | Provides potential actuaries with review and practice for an actuarial examination. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s) with B or better: ACT 310 (or ACT 415 or 430 or both ACT 440 and 441 or both ACT 450 and 451) |
| ACT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| ACT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| ADE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ADE | 242 | Introduction to Building Systems | Materials and methods of construction. Aesthetic, code and construction costs. Exposure to building information management (BIM). | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Architectural Studies major; Co-requisite: ALA 226. Credit is allowed for only ADE 242 or ATE 294, Building Systems |
| ADE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 321 | Architectural Studio I | Introductory building design problems. Emphasizes design process, communication methods, aesthetics, construction, and technology. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architecture student; ALA 226 with C or better |
| ADE | 322 | Architectural Studio II | Site and building design problems. Emphasizes programmatic and environmental determinants and building in natural and urban contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 321 with C or better |
| ADE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 421 | Architectural Studio III | Topical design problems of intermediate complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: ADE 322 with C or better; Co-requisites: APH 421, ATE 451 |
| ADE | 422 | Architectural Studio IV | Topical design problems of advanced complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 421 with C or better |
| ADE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ADE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ADE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ADE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| ADE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture, Master of Landscape Architecture, or Master of Urban Design |
| ADE | 510 | Foundation Architectural Studio | Fundamentals of architectural design, methodology, visualization, and representation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 511 | Core Architectural Studio I | Applies design fundamentals in architectural problems, including construction, technology, programmatic and environmental determinants. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 510 with C or better |
| ADE | 512 | Core Architectural Studio II | Applies architectural design fundamentals to increasingly complex problems, including specific sites and activities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 511 with C or better |
| ADE | 521 | Advanced Architectural Studio I | Design problems emphasizing theory, aesthetics, and tectonics as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 522 | Advanced Architectural Studio II | Design problems emphasizing the comprehensive integration of building systems and technologies as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 521 with a C or better; Co-requisites: APH 505 and ATE 556 |
| ADE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | PRA | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |

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| ADE | 621 | Advanced Architectural Studio III | Design problems emphasizing the urban context, planning issues, and urban design theory as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better; Co-requisite: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |
| ADE | 622 | Advanced Architectural Studio IV | Individual, student-initiated project reflecting a culminating synthesis of architectural ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better; Co-requisites: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |
| ADE | 661 | Bioclimatic Design Studio | Sustainable architectural and site synthesis at a variety of scales emphasizing bioclimatic criteria and the use of passive and low-energy systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisite: Master of Architecture or Bldg Des(Energy Perform/Bldgs) MS major |
| ADE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEC | 20 | Listening/Speaking | | N | LEC | N | GNA | University College | NC American English and Culture Program | 3-9 | | |
| AEC | 21 | Reading/Writing | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 22 | Special Programs Training | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 23 | Special Elective | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 24 | Special Programs Field-Based Learning | | N | LEC | N | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 25 | Special Programs English for Specific Purposes | | Y | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 26 | Special Programs Project Work | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 27 | Special Programs Current Issues and Topics | | Y | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 28 | Special Programs Survival English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 31 | International T.A. | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 32 | Evening English ST: Professional English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 33 | Evening English ST: Language Test Preparation | | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 34 | Evening English ST: English Skills | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 35 | Weekend English ST: Business English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 36 | Weekend English ST: Academic English | | N | LEC | Y | GNA | University College | NC American English and Culture Program | 3-9 | | |
| AEC | 37 | Weekend English ST: Professional English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 38 | Weekend English ST: Language Test Preparation | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 39 | Weekend English ST: English Skills | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | 40 | Basic 1 Listening/Speaking | On completing the Basic 1 Listening/Speaking course, a student will be able to (1) follow directions and comprehend main ideas and supporting details of short, simple passages and conversations spoken slowly; and (2) speak informally to express basic needs, habits and descriptions in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 41 | Basic 1 Reading/Writing | On completing the Basic 1 Reading/Writing course, a student will be able to (1) recognize main ideas and find supporting details in selected reading passages of a few pages; and (2) produce a guided writing with a personal point of view, demonstrating level-appropriate control of grammar, word forms, and punctuation. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 42 | Basic 1 Grammar | This course covers helping verbs, pronouns, adjectives, count/non-count nouns, and tenses (present, present progressive and simple past). | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 50 | Basic 2 Listening/Speaking | On completing the Basic 2 Listening/Speaking course, a student will be able to follow instructions, directions, and comprehend the main ideas and supporting details of 1-3 minute announcements and conversations with controlled speech and delivery; and (2) speak informally in basic social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 51 | Basic 2 Reading/Writing | On completing the Basic 2 Reading/Writing course, a student will be able to (1) recognize main ideas, find supporting details, and recognize the organizational pattern in short and page-length reading passages; and (2) produce a composition, based on a model, with a personal point of view, demonstrating level-appropriate control of grammar, word form, and punctuation. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 52 | Basic 2 Grammar | Learn grammar for everyday writing and speaking & present, progressive and future tenses, irregular verbs in the past tense, modal verbs, pronouns, order of adjectives, and comparisons. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 53 | Basic Communication Special Topic | Learn to communicate effectively at the basic level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |

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| AEC | 60 | Intermediate 1 Listening/Speaking | On completing the Intermediate 1 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of 1-5 minute listening passages, conversations, instructions, and directions with controlled speech and delivery; and (2) speak informally in common social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 61 | Intermediate 1 Reading/Writing | On completing the Intermediate 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and find supporting details in selected reading passages of a few pages; and (2) produce an organized composition, with a personal or an objective point of view, demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 62 | Intermediate 1 Grammar | Improve grammar for everyday writing and conversation; present perfect and present perfect continuous and future tenses, noun clauses, and grammar to cover frequency, duration, possibility, and necessity. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 70 | Intermediate 2 Listening/Speaking | On completing the Intermediate 2 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of 5-10 minute general topic listening passages with modified speech and delivery; and (2) speak formally and informally on a variety of general topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 71 | Intermediate 2 Reading/Writing | On completing the Intermediate 2 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details and distinguish between fact and opinion in a reading passage of several pages; and (2) produce a composition, based on a writing task, with an objective point of view demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 72 | Intermediate 2 Grammar | Focus on an overview of all the tenses. This course also covers passive voice and sequence of tenses with adverbial clauses. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 73 | Intermediate Communication Special Topic | Learn to communicate effectively at the intermediate level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 74 | Intermediate Business English Special Topic | | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 75 | Intermediate American Culture Studies Special Topic | | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 76 | Experience ASU | | N | LEC | N | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 77 | Intermediate TOEFL | Introduces test-taking strategies for the IBT TOEFL. Only Intermediate-level students may attend this class. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 78 | Internet | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 80 | Advanced 1 Listening/Speaking | On completing the Advanced 1 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of brief academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 81 | Advanced 1 Reading/Writing | On completing the Advanced 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details and determine logical inferences in selected general reading passages of several pages; and (2) produce a composition, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 82 | Advanced 1 Grammar | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 83 | Advanced TOEFL | | N | LEC | N | OPT | EE - CONV | Arizona State University | 6 | | |
| AEC | 84 | Business Case Studies | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 90 | Advanced 2 Listening/Speaking | On completing the Advanced 2 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of complex but abbreviated academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | 91 | Advanced 2 Reading/Writing | On completing the Advanced 2 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details, and determine logical inferences in authentic and selected academic and general reading passages of several passages; and (2) produce a well-developed essay, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |

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| AEC | 92 | Advanced 2 Grammar | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 93 | Advanced Communication Special Topic | Learn to communicate effectively at the advanced level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 94 | Business English Special Topic | Learn to communicate effectively in a variety of business situations and develop English skills necessary for success in today's business world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 95 | American Culture Studies Special Topic | Learn about American culture and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 96 | Academic English Studies Special Topic | Learn the Academic English necessary for success at an American university or college. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 97 | Test Preparation | Improve test-taking strategies for specific areas of the iBT (Internet-Based test) TOEFL and the Institutional (paper and pencil) TOEFL. This is an elective course that meets six hours per week. This course also includes FREE Institutional TOEFL Test while this form of the TOEFL is still available. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 98 | Professional English Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | 99 | Reading/Writing | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | 82-D | Advanced 1 Grammar | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | EE - CONV | Arizona State University | 3 | | |
| AEC | X98 | ESL Credit Course Special Topic | These courses are introductions to the university environment and to volunteerism in the community. A student will have opportunities to interact and to be exposed various aspects of American culture. These AEC elective courses can also be taken for 3 ASU credits which may be applied to a degree program. | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | X99 | International Teaching Assistants Training | The ITA training Seminar is a no-fee course offered to international students who are candidates for a teaching assistantship. The seminar is a non-credit semester long course which addresses language improvement, teaching skills, and cross-cultural training. | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs Training | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs Field-Based Learning | | N | LEC | N | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs English for Specific Purposes | | Y | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs Project Work | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs Current Issues and Topics | | Y | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Special Programs Survival English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Evening English ST: Professional English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Evening English ST: Language Test Preparation | | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Evening English ST: English Skills | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Weekend English ST: Business English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Weekend English ST: Academic English | | N | LEC | Y | GNA | University College | NC American English and Culture Program | 3-9 | | |
| AEC | | Weekend English ST: Professional English | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Weekend English ST: Language Test Preparation | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Weekend English ST: English Skills | | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | Basic 1 Reading/Writing | On completing the Basic 1 Reading/Writing course, a student will be able to (1) recognize main ideas and find supporting details in selected reading passages of a few pages; and (2) produce a guided writing with a personal point of view, demonstrating level-appropriate control of grammar, word forms, and punctuation. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Basic 1 Grammar | This course covers helping verbs, pronouns, adjectives, count/non-count nouns, and tenses (present, present progressive and simple past). | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Basic 2 Listening/Speaking | On completing the Basic 2 Listening/Speaking course, a student will be able to follow instructions, directions, and comprehend the main ideas and supporting details of 1-3 minute announcements and conversations with controlled speech and delivery, and (2) speak informally in basic social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Basic 2 Reading/Writing | On completing the Basic 2 Reading/Writing course, a student will be able to (1) recognize main ideas, find supporting details, and recognize the organizational pattern in short and page-length reading passages; and (2) produce a composition, based on a model, with a personal point of view, demonstrating level-appropriate control of grammar, word form, and punctuation. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AEC | | Basic 2 Grammar | Learn grammar for everyday writing and speaking \angle present, progressive and future tenses, irregular verbs in the past tense, modal verbs, pronouns, order of adjectives, and comparisons. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Basic Communication Special Topic | Learn to communicate effectively at the basic level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Intermediate 1 Listening/Speaking | On completing the Intermediate 1 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of 1-5 minute listening passages, conversations, instructions, and directions with controlled speech and delivery; and (2) speak informally in common social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Intermediate 1 Reading/Writing | On completing the Intermediate 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and find supporting details in selected reading passages of a few pages; and (2) produce an organized composition, with a personal or an objective point of view, demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Intermediate 1 Grammar | Improve grammar for everyday writing and conversation \angle present perfect and present perfect continuous and future tenses, noun clauses, and grammar to cover frequency, duration, possibility, and necessity. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Intermediate 2 Listening/Speaking | On completing the Intermediate 2 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of 5-10 minute general topic listening passages with modified speech and delivery; and (2) speak formally and informally on a variety of general topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Intermediate 2 Reading/Writing | On completing the Intermediate 2 Reading/Writing course, a student will be able to recognize the main ideas and supporting details and distinguish between fact and opinion in a reading passage of several pages; and (2) produce a composition, based on a writing task, with an objective point of view demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Intermediate 2 Grammar | Focus on an overview of all the tenses. This course also covers passive voice and sequence of tenses with adverbial clauses. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Intermediate Communication Special Topic | Learn to communicate effectively at the intermediate level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Intermediate TOEFL | Introduces test-taking strategies for the iBT TOEFL. Only Intermediate-level students may attend this class. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Internet | | N | LEC | N | OPT | EE - CONV | Arizona State University | 0 | | |
| AEC | | Advanced 1 Listening/Speaking | On completing the Advanced 1 Listening/Speaking course, a student will be able comprehend the main ideas and supporting details of brief academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Advanced 1 Reading/Writing | On completing the Advanced 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details and determine logical inferences in selected general reading passages of several pages; and (2) produce a composition, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Advanced 2 Listening/Speaking | On completing the Advanced 2 Listening/Speaking course, a student will be able to (1) comprehend the main ideas and supporting details of complex but abbreviated academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Advanced 2 Reading/Writing | On completing the Advanced 2 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details, and determine logical inferences in authentic and selected academic and general reading passages of several passages; and (2) produce a well-developed essay, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 9 | | |
| AEC | | Advanced 2 Grammar | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Advanced Communication Special Topic | Learn to communicate effectively at the advanced level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |

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| AEC | | Business English Special Topic | Learn to communicate effectively in a variety of business situations and develop English skills necessary for success in today's business world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | American Culture Studies Special Topic | Learn about American culture and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Academic English Studies Special Topic | Learn the Academic English necessary for success at an American university or college. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | Test Preparation | Improve test-taking strategies for specific areas of the iBT (Internet-Based test) TOEFL and the Institutional (paper and pencil) TOEFL. This is an elective course that meets six hours per week. This course also includes FREE Institutional TOEFL Test while this form of the TOEFL is still available. | Y | LEC | Y | GNA | University College | NC American English and Culture Program | 3 | | |
| AEC | | ESL Credit Course Special Topic | These courses are introductions to the university environment and to volunteerism in the community. A student will have opportunities to interact and to be exposed various aspects of American culture. These AECP elective courses can also be taken for 3 ASU credits which may be applied to a degree program. | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEC | | International Teaching Assistants Training | The ITA training Seminar is a no-fee course offered to international students who are candidates for a teaching assistantship. The seminar is a non-credit semester long course which addresses language improvement, teaching skills, and cross-cultural training. | N | LEC | Y | OPT | University College | NC American English and Culture Program | 3 | | |
| AEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| AEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 313 | Aircraft Dynamics and Control | Aircraft static stability, equations of motion; dynamic modes and stability; stability derivatives; response to controls; introduces automatic control of aircraft. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 318 with C or better. |
| AEE | 325 | Aerospace Structures and Materials | Applies structural analysis to aircraft and spacecraft structures. Loads on aerospace structures, buckling and stability, stiffened panels, primary wing and launch-vehicle structure, vibration of large structures, properties and selection of aerospace structural materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Aerospace Engineering major; MAE 213, 384 (C or better), OR Materials Science and Engineering major; MSE 211, 315 (or MSE 415) with C or better. Credit is allowed for only AEE 325 or MAE 394 (Structural Materials in Aerospace) or MEE 322. |
| AEE | 344 | Fundamentals of Aircraft Design | Aircraft performance, RFP's, Federal Aviation Regulations, aircraft sizing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 214 and 384 with C or better; Pre- or corequisite(s): AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better if completed. |
| AEE | 360 | Aerodynamics | Airfoils and wings, ideal flow, boundary layers, finite-difference solutions, wind-tunnel testing. Both AEE 360 and AEE 362 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; ENG 102, 105, or 108 with C or better; MAE 240 and 384 with C or better. |
| AEE | 362 | High-Speed Aerodynamics | Compressible flow at subsonic and supersonic speeds; ducts, nozzles, and diffusers; normal and oblique shocks, transonic flow, numerical solutions; experimental applications. Both AEE 362 and AEE 360 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 384 with C or better. |
| AEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 415 | Vibration Analysis | Free and forced response of single and multiple degree of freedom systems, continuous systems; applications in mechanical and aerospace systems numerical methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 318 and 384 with C or better; Credit is allowed for only AEE 415 or MAE 598 (Vibration Analysis). |
| AEE | 426 | Design of Aerospace Structures | Flight vehicle loads, design of semimonocoque structures, local buckling and crippling, fatigue, aerospace materials, composites, joints, and finite element applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Aerospace Engineering BSE major; AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better; Credit is allowed for only AEE 426 or MAE 598 (Design of Aerospace Structures). |
| AEE | 445 | Fundamentals of Spacecraft Design | Spacecraft subsystems. Systems engineering, space mission design, space environment. Cost analysis. Risk and reliability analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 325 (or MAE 394 Aerospace Structures and Materials) with C or better; MAE 214 and 318 with C or better; Credit is allowed for only AEE 445 or MAE 494 (Fundamentals Spacecraft Dsgn). |
| AEE | 462 | Space Vehicle Dynamics and Control | Attitude dynamics and control, orbital mechanics, orbital transfer/rendezvous, spacecraft control systems design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better. |
| AEE | 463 | Aircraft Propulsion | Fundamentals of gas-turbine engines. Analysis and design of components. Alternative aircraft propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 362 with C or better; MAE 384 with C or better. |
| AEE | 465 | Rocket Propulsion | Rocket flight performance; nozzle design; combustion of liquid and solid propellants; component design; advanced propulsion systems; interplanetary missions; testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 or MAE 362 with C or better; MAE 462 with C or better. |
| AEE | 466 | Rotary Wing Aerodynamics and Performance | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 with C or better; Credit is allowed for only AEE 466 or MAE 566. |
| AEE | 468 | Aircraft Systems Design | Group projects related to aircraft vehicle design, working from mission definition and continuing through preliminary design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 313 and 344 with C or better; MAE 400 with C or better; Pre- or corequisite(s): AEE 463 with C or better if completed. |

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| AEE | 471 | Computational Fluid Dynamics | Numerical solutions for selected problems in fluid mechanics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 or MEE 340 with C or better; MAE 384 with C or better; Credit is allowed for only AEE 471 or MAE 561 |
| AEE | 478 | Fundamentals of Autonomous Aircraft Systems | First of a two-semester capstone sequence. Introduces autonomous aircraft performance and operations, aircraft performance prediction, ground control and support, sensors, communications and telemetry, aerospace ethics and law, design methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s) with C or better: AEE 313, 360 |
| AEE | 479 | Design of Autonomous Aircraft Systems | Interdisciplinary capstone design project for aerospace and electrical engineering students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: MAE 400 with C or better; AEE 478 with C or better |
| AEE | 480 | Space Systems Design | Group projects related to space systems design, working from mission definition and continuing through conceptual design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 445 (or MAE 445) with C or better; EEE 350 with C or better; MAE 214 with C or better; Pre- or corequisite(s): AEE 465 (or MAE 465) with C or better if completed |
| AEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| AEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| AEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| AEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| AEP | 501 | Practical and Professional Ethics | Acquaints students with practical and professional ethics. Assumes no prior experience in ethics, and provides practicable knowledge as well as theoretical knowledge. The first in a series of courses for the MA program in Applied Ethics and the Professions, the course is primarily intended to prepare students in that degree program for their subsequent courses. However, it has been designed to be useful to all graduate students who are interested in learning about practical and professional ethics. The beginning of the course is devoted to the more general subjects of practical ("everyday") ethics and professional ethics, while the remaining weeks are spent focusing on the ethical issues that occur in the context of specific professions, with particular emphasis given to those professions that seem most relevant to the aspirations and interests of the students enrolled in the course. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student or Barrett Honors student |
| AEP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AEP | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AES | 101 | Air Force Today I | Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 102 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes common Air Force customs and courtesies, drill and ceremonies, health and physical fitness through group participation. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 101 |
| AES | 103 | Air Force Today II | Introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: introduction to leadership, Air Force core values, introduction to interpersonal communication and team building, and a continuation of communication skills. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 104 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes learning the environments and dynamics of an Air Force officer. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 103 |
| AES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AES | 201 | The Evolution of USAF Air and Space Power I | Focuses on facilitating the transition from Air Force ROTC cadet to Air Force ROTC candidate. Examines the general aspects of air and space power through a historical perspective. Utilizing this perspective, covers a time period from the first balloons and dirigibles to the modern technology currently used in overseas contingency operations. Featured topics include: Air Force heritage, Air Force leaders, introduction to ethics and values, group leadership problems and continuing application of communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 202 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Provides application of advanced drill and ceremonies; issuing commands; knowing flag etiquette; and developing, directing, and evaluating skills to lead others. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 201 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AES | 203 | The Evolution of USAF Air and Space Power II | Provides knowledge-level understanding for general element and employment of air and space power. Furthermore, discusses the importance of Air Force Core Values with use of operational examples and historical Air Force leaders. Continues to develop communication skills. Topics include: the Air Force mission and organization, modern joint expeditionary Airmen, officer opportunities, and professionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 204 | Leadership Lab | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes preparation for field training. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 203 |
| AES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-4 | | |
| AES | 301 | Air Force Leadership Studies I | Study of communication skills, leadership and quality management fundamentals, leadership ethics, and professional knowledge required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 302 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experiences applying leadership and management principles to motivate and enhance the performance of other cadets. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 301 |
| AES | 303 | Air Force Leadership Studies II | Continuation of AES 301. Topics include: communication skills, ethics, leadership, professional knowledge, and quality management required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 304 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes planning the military activities of the cadet corps and applying advanced leadership methods. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 303 |
| AES | 401 | National Security Affairs | Examines advanced ethics, Air Force doctrine, national security process, and regional studies. Special topics include: civilian control of the military, military justice, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 402 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experience demonstrating learned skills in planning and controlling the military activities of the corps. | N | LAB | Y | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 401 |
| AES | 403 | Preparation for Active Duty II | Continuation of AES 401. Topics include: civilian control of the military, doctrine, ethics, military justice, the national security process, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | | |
| AES | 404 | Leadership Lab | Continuation of AES 402 with emphasis on preparation for transition from civilian to military life. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | |
| AES | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-7 | L | |
| AES | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | |
| AES | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 191 | First-Year Seminar | | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| AET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | 210 | Measurements and Testing | Measurement systems, components, system response, and the characteristics of experimental data. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 112; Pre/Corequisite(s): MAT 266 |
| AET | 215 | Aircraft Systems | Principles and design features of aircraft structures, systems, and materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| AET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | 300 | Aircraft Design I | Applied aerodynamics, standard atmosphere, speed measurement, infinite and finite wings, airplane performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: AET 215, MET 211, ECE 210, or MAE 212 |
| AET | 310 | Instrumentation | Measurement systems, components, system response, and the characteristics of experimental data. Methods of collecting and analyzing data. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MAT 266 or MAT 271; AET 210 |
| AET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | 415 | Gas Dynamics and Propulsion | Introduces compressible flow, internal and external flow, and aerothermodynamic analysis of propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): AET 300; MET 340 or MAE 340 or Fulton Schools of Engineering graduate student |
| AET | 417 | Aerospace Structures | Analysis and design of aircraft and aerospace structures. Shear flow, Semimonocoque structures. Effects of dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MET 213, MET 313 (or ECE 313); MET 212, AET 312 (or ECE 312); AET 300 |
| AET | 420 | Experimental Aerodynamics and Wind Tunnels | Experimental applied aerodynamics related to aeronautical and mechanical design. Wind tunnel design and testing. Low speed flows. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: AET 300; MET 340 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AET | 432 | Applied Heat Transfer | Heat transfer by conduction, convection, and radiation. Applies heat transfer to engineering design problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): ETC 340 or Prerequisite(s) MET 340; Credit is allowed for only AET 432 or 524 |
| AET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Polytechnic School BS student; minimum cumulative GPA of 3.00; minimum Junior standing |
| AET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Pre-requisites: Manufacturing Engineering Technology students; Minimum cumulative GPA of 2.00 |
| AET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Pre-requisites: Manufacturing Engineering Technology students; Minimum cumulative GPA of 2.00 |
| AET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| AET | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 524 | Application of Heat Transfer | Energy conservation, steady-state and transient conduction, convection transfer, free and forced convection Reynolds analogy, blackbody and environmental radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 432 or MAE 340; Credit is allowed for only AET 524 or AET 432 |
| AET | 525 | Advanced Propulsion | Mechanics and thermodynamics of propulsion systems. Solid, liquid propellant rocket design performance. Electrical nuclear propulsion systems. Space missions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 434, AET 415 or MAE 340 |
| AET | 560 | Numerical Methods in Engineering Technology | Analyzes problems in physical sciences, models physical problems, perturbation techniques, curvefitting, data analysis, numerical solutions, ordinary and partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Engineering students; Senior or higher academic level |
| AET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | | First-Year Seminar | | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| AET | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| AET | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Polytechnic School BS student; minimum cumulative GPA of 3.00; minimum Junior standing |
| AET | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AET | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Pre-requisites: Manufacturing Engineering Technology students; Minimum cumulative GPA of 2.00 |

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| AET | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Pre-requisites: Manufacturing Engineering Technology students; Minimum cumulative GPA of 2.00 |
| AET | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| AET | | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 191 | First Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AFR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 200 | Introduction to Africana Studies | Introduces the study of African and African-descended peoples; theory, themes, and perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | |
| AFR | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| AFR | 210 | Introduction to African American Studies | Examines the political, historical, and cultural origins of African American studies as an academic discipline. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | |
| AFR | 212 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| AFR | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |
| AFR | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |
| AFR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 300 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |
| AFR | 301 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| AFR | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| AFR | 303 | African and African American Art | Critical examination of the anthropological perspective of ancient visual arts traditions of African and African American art. The course studies both African arts in Africa as well as the contribution of African American artist to American visual culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present; looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |
| AFR | 305 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy, slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| AFR | 310 | African/African American Psychology | In-depth study of the historical development of African and African American psychology. Course will critically examine the African American frame of reference as well as examine African and African American psychology from a contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |

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| AFR | 312 | Contemporary African and African Diaspora Women | A critical analysis of recent literary, theoretical, and methodological themes concerning the study of African and African Diaspora women. Particular study will focus on the historical impact these themes have had on the phenomena of transformation by various African and African Diasporan women's populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 317 | Genes, Race and Society | An in-depth examination of the biological and social construction of race in western societies. Special emphasis is placed on examining these constructs from a historical perspective | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 318 | African and African Diaspora Women Writers | Intersection of race, class, gender, and ethnicity in black women's fiction from the United States, the Caribbean, and Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| AFR | 319 | Black Experience in Latin America | In-depth study of multiple aspects of the experiences of Africans in the Latin America diaspora. Includes an advanced comparative study of Africans in Latin America and the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 320 | Africa: Politics, Environment, and Development | An in-depth analysis of the African experience as a way to understand the consequences of human environment relationships, wealth and power differentials, and individual and global citizenship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 325 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| AFR | 327 | Human Rights in Africa | In-depth study of the development of African organizations and instruments engaged in the dynamic processes of conceptualizing human rights that reflect its particular histories. It will also assess the effectiveness and appropriateness of efforts to address the human rights abuses and violations found in Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| AFR | 331 | Studies in African American Women Writers of Pre-Harlem Renaissance | In depth analysis and advanced comparative study of novels, short stories, essays, speeches, and dramas that gave voices to African American woman in the pre-Harlem Renaissance era. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) and ENG 101 or 105 or 107 with C or better OR ENG 101 or 105 or 107 with C or better and minimum 45 hours |
| AFR | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ASB 222; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| AFR | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AFR | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and Africans Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| AFR | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| AFR | 340 | The Making of Modern Africa | Advanced study of the events and processes leading up to the colonization of Africa and the subsequent changes in African societies under colonial rule and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 342 | Survey of African Literatures | In-depth study of the intersection of colonialism, race, class, gender, nationalism, postcoloniality, social transformation, and ethnicity in African writers' fiction and literary production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| AFR | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AFR | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| AFR | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| AFR | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| AFR | 355 | Democracy and Civil Society in Africa | Advanced examination of contending perspectives on the state and civil society of Africa. Course will specifically analyze the democratic struggles in sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 360 | Black Families in the Diaspora: U.S. and Caribbean | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| AFR | 363 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| AFR | 364 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AFR | 365 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 365 (or AFH 364) or WST 364 |
| AFR | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Places special study on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| AFR | 370 | Family, Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| AFR | 372 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 386 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| AFR | 373 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| AFR | 375 | Race, Gender and Sport | Advanced and interdisciplinary examination of the social concepts of race and gender and their economic impact on sports in America. In-depth studies will focus on the role of regulatory agencies, the impact of these regulatory agencies have on sport as well as multiple legal issues surrounding athletics | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 380 | Health Issues in the African American Community | In-depth examination and discussion of African American health across the lifespan. Discusses the factors associated with disparities in health and healthcare. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 380 (or AFS 380) or 394 (Hltl Issues Af/Am Community) |
| AFR | 383 | Blacks in Science, Medicine and Public Health | In-depth study of Blacks who have made significant contributions to science and medicine in the U.S. Begins with a critical examination of ancient African scientific contributions. Highlights specific individuals, analyzing their life's path to their respective careers. Also discusses the role of racism and discrimination and their efforts to overcome these. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 383 (or AFS 383) or AFS 394 (Blacks in Science, Medicine, and Public Health) |
| AFR | 385 | Popular Black Media and Adolescent Risk Behavior | In-depth examination of the existing research that supports and refutes the hypothesis that exposure to various media content influences subsequent behavior. Students complete a content analysis of risk behaviors in various forms of the adolescent media environment, including music, music videos, television shows, movies, the Internet and video games. Specific risk behaviors include violence and aggression, drug use, and sexual risk activity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AFR | 414 | Black Political Movements: Pan Africanism to Black Power | In-depth examination of the three defining 20th century political movements in Africa and the African Diaspora (USA, Europe, Latin America and the Caribbean)/the Pan Africanist, the Civil Rights and the Black Power movements. A primary course objective is to synthesize a comprehensive understanding of Black/African politics and society from a Diasporan perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 9 upper-division hours; junior standing. Credit is allowed for only AFR 394 (Black Political Movements) or AFR 414 or JUS 414 |
| AFR | 415 | Black Political Thought and the Limits of Liberal Democracy | Critical examination of the ideas that have shaped politics in the Black World from the mid-nineteenth century onwards. These include ideas of resistance, liberation, nation and governance, emanating from Africa, the USA, the Caribbean and Latin America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or 9 upper-division hours and junior standing |
| AFR | 418 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| AFR | 420 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |
| AFR | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| AFR | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |
| AFR | 460 | Race, Gender and Media | Reading seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |
| AFR | 465 | Harlem Renaissance: a Cultural History: 1877-1945 | Socio-political, historical contexts and worldwide ramifications of the cultural productions (theater, music, visual arts, and literature) of the Harlem Renaissance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| AFR | 466 | Peoples and Cultures of Africa | An in-depth study of the diversity of African people and culture from an interdisciplinary perspective. Emphasizes social, political, and economic relations, as well as inequality, art, gender roles, slavery, and slave trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| AFR | 470 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| AFR | 480 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| AFR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| AFR | 490 | Field Studies in the Diaspora | Introduces methods and principles of research applied to Black communities within and outside Arizona. Involves working with field officer and faculty. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| AFR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AFR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Prerequisite(s): 9 upper-division hours or AFR 200 (or AFS 200) and junior standing |
| AFR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| AFR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 508 | Colonial Rule and the African Experience | Impact of European colonial rule on the shaping of African consciousness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 525 | Foundations of Caribbean Studies | Broad interdisciplinary understanding of the Caribbean that surveys the region's history, politics, economy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 526 | Selected Topics in Caribbean Politics | In-depth understanding of the impact of selected topics on the political economy and social infrastructure of the Caribbean. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AFR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AFR | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AFR | | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AGB | 100 | Introduction to Agribusiness | Overview of agribusiness industries and career opportunities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 302 | International Management and Agribusiness | Management and agribusiness issues in the transition of developing countries from subsistence to global operations and competition. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | G | Pre-requisite: ECN 212 or ECN 214 with grade of C or better. Credit is allowed for only BUA 394 (Perspectives in Global Business) or MGT 302 |
| AGB | 321 | Agribusiness Marketing | Focuses on food and consumer products marketing at an intermediate level. Covers strategic concepts such as situational analysis, planning and objectives, and target marketing and positioning. Illustrates both the theory and application of strategic decision making through case analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 333 | Agribusiness Finance | Introduces financial markets and institutions. Interest rate determination, money and banking, equity markets, farm credit system, vendor financing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): ACC 231 |
| AGB | 340 | Food Processing | Introduces processed food quality assurance, statistical sampling, and inspection procedures. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 360 | Agribusiness Statistics | Statistical methods with applications in agribusiness and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | CS | |
| AGB | 366 | Agribusiness Production Technologies | Examines methods for managing diverse crop and livestock enterprises with an emphasis on growth, development, marketing, and loss prevention. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 367 | Agribusiness Processing Technologies | Biotechnology and other methods used in the production, processing, and distribution of food. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 372 | Introduction to Veterinary Practice Management Module I | Initial offering of a three-module program that is an overview of the operation of a veterinary practice. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 374 | Veterinary Practice Management Module III: Finance and Marketing | Final course of a three-module program covering financial and marketing issues faced by veterinary practice managers. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 410 | Agribusiness Management | Principles of human resource management in agribusiness firms. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 414 | Agribusiness Analysis | Analysis of agribusiness firm decisions in the ecological, economic, social, and political environments. Special emphasis on ethical issues surrounding food production and consumption. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | L | Prerequisite(s): Minimum 87 hours; AGB 321 and 333 |
| AGB | 420 | Food Advertising and Promotion | Focuses on advertising and promotional strategies in the food industry, with an emphasis on the Consumer Packaged Goods (CPG) industry. Recommended proficiency in the computer applications used in this class: word processing, spreadsheets, graphics, presentations, and the Internet. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, MKT 300, 302, 303 or TMC 310 (BUA 382) |
| AGB | 422 | Consumer Behavior | Applies behavioral concepts in analyzing consumer food purchases and their implications for marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300, or TMC 320 |
| AGB | 424 | Agribusiness Sales | Principles and techniques of selling and merchandising in the agricultural and food industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300, or TMC 320 |
| AGB | 425 | Food Supply Networks | Methods, resources and information used to store and deliver food products in a global market. Supplier and customer perspectives help students understand what it takes to develop competitive advantage through distribution and logistics in a global marketplace. Emphasizes food supply network complexities and system design that helps develop critical thinking skills students will be able to use in any area of business. Practicum section with field trips to major food business firms, governmental organizations and industry associations located in metro Phoenix and Nogales area. | N | LEC | N | GNA | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: AGB 321, FIN 300, or TMC 320 |
| AGB | 429 | Marketing Research | Examines the marketing research process and its role in facilitating agribusiness decisions. Emphasizes problem identification, survey design, and data analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: AGB 321 and MKT 300 with C or better. |
| AGB | 431 | Agribusiness Financial Management | Comprehensive treatment of topics in financial management of agribusiness: capital structure, dividend policy, asset valuation, mergers and acquisitions, risk management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300 or TMC 320 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AGB | 433 | Agribusiness Financial Markets | Role and function of agribusiness in U.S. financial system. Topics include rural banking, farm credit system, monetary policy, and federal reserve. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 333 or FIN 300 |
| AGB | 434 | Agricultural Risk Management and Insurance | Strategies to manage agricultural price and business risk: derivatives, insurance, self-insurance, and public policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 435 | Commodity Futures and Options Markets | Provides an understanding of how to use futures and options markets in a risk management and pricing context, especially as it pertains to the marketing and procurement of agricultural commodities by grain and livestock merchandisers, food manufacturers, and producers/distributors/consumers of natural resources. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 440 | Food Safety | Control, prevention, and prediction of microbial and chemical food-borne diseases. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 442 | Food and Industrial Microbiology | Food- and industrial-related microorganisms; deterioration and preservation of industrial commodities. Lecture, lab. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 4 | | |
| AGB | 445 | Food Retailing | Food retail management. Discusses trends, problems, and functions of food retail managers within various retail institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321 or TMC 310 (BUA 382) or MKT 300 or MKT 302 or MKT 303 |
| AGB | 452 | International Agricultural Policy | Use of international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 454 | International Trade | International practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: AGB 302 |
| AGB | 456 | Food Product Innovation and Development | The food product development process and how it interfaces with food technology and packaging concepts. Emphasizes the team approach, which is prevalent in the food industry. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: Senior standing |
| AGB | 470 | Comparative Nutrition | Effects of nutrition on animal systems and metabolic functions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 481 | Microeconomic Analysis of Food Markets | By applying the basic concepts of microeconomics to real-world data, this course allows the student to not only gain a book-oriented understanding of how businesses in the food industry behave, but practical, hands-on experience that lasts far beyond the classroom. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | | Prerequisite(s): Barrett Honors student |
| AGB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AGB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | L | |
| AGB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 511 | Advanced Agribusiness Management | Analysis of organization behavior, change, and resource requirements within agribusiness systems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 514 | Advanced Agribusiness Analysis | Vertical integration and differentiation in food and agricultural industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 528 | Advanced Agribusiness Marketing | Theory and analysis of marketing strategy related to food and fiber products. Covers concepts of strategic market planning (e.g., segmenting, targeting and positioning), with application of these concepts at an advanced level. Also examines the broad social, cultural, political and economic issues that impact marketing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 529 | Advanced Agribusiness Marketing Channels | Analyzes agribusiness market channel systems. Formulation of marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 532 | Advanced Agribusiness Finance | Financial management of agribusiness firms; agribusiness financial analysis, investment analysis, agricultural risk management, and introduction to agricultural financial intermediaries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 535 | Commodity Analysis | Analysis of commodity markets. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 552 | International Agricultural Policy | Uses international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 554 | Advanced International Trade | Advanced international practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 560 | Advanced Agribusiness Management Systems | Development and use of decision support systems for agribusiness management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 561 | Applied Econometrics | Uses model building, hypothesis testing, and empirical analysis in solving agribusiness problems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 570 | Managerial Economics for Agribusiness | Concepts in micro- and macroeconomics applied to agribusiness management environments: price formation, market structure, information economics, fiscal and monetary policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AGB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 589 | Agribusiness Capstone | Strategic management of organizations focusing on developing value-creating strategies in dynamic environments. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 701 | Advanced Agribusiness I | Advanced topics include demand analysis, empirical industrial organization, welfare economics, agricultural policy, international trade, and consumer behavior. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 702 | Advanced Agribusiness II | Topics include macromarketing, marketing research, futures and options markets, derivatives, risk management, financial innovation, and forecasting. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 703 | Agribusiness Research Methods | Survey course in current research methods in economics, marketing, finance, and management as applied to agribusiness topics. May be repeated for credit. | N | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 180 | Introduction to American Indian Studies | Introduces the study of American Indian justice issues from an interdisciplinary perspective. Primary topics include sovereignty, law, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 280 | American Indian Sovereignty and the Courts | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. government. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 285 | Federal Indian Policy | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. government. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |

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| AIS | 320 | American Indian Philosophies and World Views | Does it make sense to speak about American Indian intellectuals, thinkers or philosophers? Not only have Indians been thinking and thinking deeply for generations, but they have also produced a body of written works that have formed the foundation of contemporary American Indian studies. Covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): junior standing; ENG 102, 105 or 108 with C or better. Credit is allowed for only AIS 320 or 394 (American Indian Philosophical/World Views) |
| AIS | 360 | Issues in Urban Indian Country | In-depth examination of the historical, social, economic, and political implications of indigenous migrations to urban areas. Over 50% of Native people are living in cities. What are they doing? Why are they there? Are they still under the federal trust relationship? Evaluates the social, political, and economic structures built by American Indians living in the urban environment. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 360 or 394 (Issues in Urban Indian Country) |
| AIS | 370 | American Indian Languages and Cultures | Emphasizes understanding of Indian language families and the relationship of oral traditions to culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisite: AIS 180 with C or better |
| AIS | 380 | Contemporary Issues of American Indian Nations | Surveys legal, socioeconomic, political, and educational state of contemporary reservation and urban Indians. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 381 | American Indian Women | Draws from a diverse range of Indigenous critical traditions to examine discourses of gender, identity, and sexuality as sites of cultural revitalization and conflict and theorizes the meaning of each of these categories from diverse Indigenous communities. Considers contemporary and traditional works by Indigenous women with a special emphasis on the historical, socio-cultural, and legal contexts of each work. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisites: WST 100, 300, or AIS 180 with C or better OR co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit is allowed for only AIS 381 or WST 382 |
| AIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 420 | American Indian Studies Research Methods | Surveys diverse research methods, including statistical, historical, interpretative, and narrative approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | L | Pre-requisite: AIS 180 with C or better |
| AIS | 430 | Contemporary Indigenous Spirituality | Why do so many indigenous people across North America want to revitalize their traditional ways when there is supposedly so much opportunity awaiting them in all segments of American society? What are the benefits of such an endeavor and what might be the consequences if this objective is not pursued? This course is premised on the hypothesis that indigenous customs and beliefs contain knowledge that is not only vital to the well-being of the communities in which this native wisdom is found, but also to those communities seeking a more sustainable way of living in the land they call home. After delving into a critique of the religious principles that went into the settling of America, complete with notions of manifest destiny, a way is opened for a more native-oriented discourse on community, nature, economy, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 430 or 494 (Ind Spirituality in Postmodern) |
| AIS | 455 | Human Rights and Cultural Resource Laws | Examines how U.S. laws, policies, executive orders, and court decisions have affected Indian nations and peoples in matters of cultural resources and burial rights. Considers the protests, legal battles, and political campaigns Indians have waged to reaffirm their fundamental human rights in the areas of repatriation and sacred sites protection. Examines the ways in which filmmakers and the media present these issues to the public. Assesses the present status of Indian religious rights and cultural resource laws. Sovereignty and its relationship to Indian spirituality is a theme that permeates the course. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 455 or 494 (American Indian Cultural Resources) |
| AIS | 470 | Tribal Governance | Critical and historical examination of Indigenous governance and leadership. Includes a survey of historical policy developments and political change that laid the foundation for contemporary Indian government and an assessment of the effectiveness of modern tribal administrations and decision-making bodies. Explores the diverse approaches to tribal governance, community-based political strategy and local interpretations and assertions of sovereignty and self-governance. Project work facilitates focused student learning on the challenges and opportunities in government for a specific Indian nation. Case work and consultation with practitioners in Indian government complement textbook reading in law, history and policy. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: AIS 285; Credit is allowed for only AIS 470 or AIS 494, Tribal Governance |
| AIS | 480 | Actualizing Decolonization | Provides an in-depth investigation of the theory and concepts of colonization, decolonization, and Indigenous peoples in America, with brief comparisons with global Indigenous peoples and experiences. Covers classic scholarly works on colonization and decolonization to understand the frameworks in which colonization and decolonization develops, expands, and impacts Indigenous peoples. Through that theoretical understanding, examines and formulates ways in which decolonization can impact and be integrated into Indigenous lives and communities. Students shift from theory to praxis by writing and presenting on an informal grant proposal for a decolonizing project that can be implemented in an Indigenous or non-Indigenous community. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisites: ENG 101; ENG 102; Junior standing; Credit is allowed for only AIS 480 or 494 (Readings-Decolonization) |
| AIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | | Prerequisite(s): Barrett Honors student |

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| AIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-7 | L | |
| AIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | |
| AIS | 501 | American Indian Studies Paradigms | American Indian Studies emerged as an academic discipline in the late 1960s in part because of increasing dissatisfaction among Indians about the works of historians, anthropologists, and other scholars that was very often marred by methodological and conceptual flaws. Course provides an overview of ways of "doing" Indian studies from an American Indian Studies paradigm(s) through a critical examination of some of the most significant works emanating from this growing body of literature. Critiques paradigms that selected scholars have employed in the researching and writing of their topics. Seminar format allows students to take the lead in discussing each week's readings. Covers a range of scholarship dealing with American Indian issues; explores the development of American Indian Studies as an academic discipline; probes paradigms that Indigenous scholars have developed; and considers how those paradigms differ from those used by other disciplines. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 502 | American Indian Studies Research Methods | Prepares students for thesis research, writing, and completion. Surveys graduate research methods in the field of American Indian Studies including historical, interpretive, and narrative approaches. Focuses on methodological issues specific but not limited to American Indian and Indigenous Studies. Focuses on Indian-centered methodological approaches to research that are essential to qualitative writing of the various topics in Indian country and other issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 503 | Contemporary Issues of American Indian Nations | Provides an overview of the current status of American Indian Nations with regard to sovereignty, policy, politics, economy, and society. An exploration of current issues illustrates the unique challenges and innovative solutions put forth by Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 504 | American Indian Film and Activism | Examines the American Indian film and activism with emphases on American Indian production, directing, editing, investigative journalism, documentary film, entertainment, and research. Exposes students to the development of activism in film and how film has been utilized to educate, inspire, and contribute to the challenges in Indian Country. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 505 | Contemporary Visual Arts of American Indians | Focuses on a critical analysis of art, film, and media as they intersect with shaping the image and sustaining the culture of American Indians in North America. Examines the persistent and inappropriate stereotypes of American Indians as portrayed in film and media, including explanations for the persistence of negative stereotypes drawing on various aspects of critical race theory including power, politics, and race. Also introduces the scope and diversity of American Indian art and artists and highlights how native artists portray their views and culture through contemporary image making and representations. Stresses the interplay of art with sovereignty, identity, and politics. Emphasizes the powerful and significant connection between contemporary American Indian art and the persistence of indigenous cultures. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 506 | Indigenous American Literature and the Tribal Community | Teaches Indigenous (Indian, Native American, First Nations) literature's role in Indigenous history, cultural history, philosophy, society, culture, and developing cultural traditions. Students learn how tribal communities articulate themselves intellectually and artistically through literature and its development locally, nationally, and internationally. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 508 | Revitalizing Indigenous Languages | Critically examines Indigenous languages, their decline and revitalization from a language ecology and a self-determination perspective. Includes historical, sociopolitical, educational, linguistic, sociolinguistic, and cultural issues that have had and continue to impact Indigenous peoples and their languages worldwide and their reclamation efforts. Also examines various epistemologies, theories, ideologies, and practices of Indigenous people (including American Indian, Indigenous Alaskan, Hawaiian, Maori, Quechua). Topics include: language policy and planning, language acquisition, child language socialization, identity development, bilingual education, Indigenous language pedagogy, and current models and approaches for Indigenous language maintenance and revitalization (ILMR). | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 509 | American Indian and Indigenous Rights | Examines the rights of American Indian peoples with an emphasis on asserting indigenous rights in national as well as international forums. Challenges students to address issues related, but limited to: treaty rights, land rights, water rights, self-determination, rights to a distinct culture, religion, language, spiritual practices, customs, ceremonies, nationhood, autonomy, to seek redress and justice, rights to education, rights to protect from destruction and violence, rights to economic development, rights to protect lands from military, ecological, cultural, and environmental threats, and other rights that may affect the lives of American Indian people. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 510 | Social Change in American Indian Communities | Committed to the preservation of political autonomy and cultural identity, American Indian communities are increasingly gaining rule over the effects of social change imposed upon them. Recapturing their histories and redefining colonial relationships, they are forging a preferred future grounded in their own traditional institutions of community, religion, and strengthening of self-determination. Provides students with: (1) an understanding of the enduring struggle of American Indian communities to resist the movement of collective assimilation and retain the right of self-determination; (2) an examination over time of social changes in American Indian communities' social structures and their political and social movements towards the establishment of environmental, economic, and social justice; and (3) knowledge of strategies and tactics for achieving social change within American Indian communities that support Indian self-determination and self-governance. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 511 | Genders and Sexualities in American Indian Societies | Grounds students in the theory and concepts of American Indian genders and sexualities. In American Indian societies, there were more than two genders. With colonization through laws, boarding schools, and loss of culture, language, and land, these different genders were attacked and made to disappear. Examine the concepts of gender and sexuality from Native perspectives and theory, and through western imperial views. Also covers the ways in which decolonization plays a role in understanding indigenous genders and sexualities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 512 | Historical Trauma, Healing, and Decolonization | In recent years, scholars have begun to explore the prevalence of historical trauma among American Indian communities. This research argues that the genocide, violence, breakdown of customary cultures through external coercion, and oppression that Indians continue to face at the hands of foreign colonizers has left Indians with harmed with intergenerational self-destructive behavior, domestic violence, suicide, anxiety, depression, low self-esteem, and anger. As a result of this violence and oppression, they have developed models of recovering healthy nations while challenging violations of their human rights in the domestic and international arenas. This history has given rise to a widespread cultural revitalization movement often referred to as decolonization. Scholars from an array of academic disciplines are producing a growing body of literature about decolonization. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 513 | Urban Indian Issues | According to the 2010 Census, 64.1% of the American Indian/Alaskan Native population resides in a place outside of tribal areas. Cities such as Los Angeles, New York, and Phoenix have historically counted more than 25,000 American Indian residents. What draws Indigenous families to urban areas? How does an urban address impact the federal trust relationship with nonreservation Indians? What are the social, political, and economic implications for a family who lives off the reservation and away from tribal homeland? Course explores these issues and dynamics and challenges the student to examine the unique identity and contributions of urban Indians. Students learn the history of Indigenous migrations to the city and assess current needs and concerns through consultation work coordinated with Phoenix area Indian Centers and nonprofit organizations. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 514 | American Indian Intellectuals | Does it make sense to speak about American Indian "intellectuals," "thinkers," or "philosophers"? Not only have Indians been thinking and thinking deeply for generations, but they have produced a body of written works that have formed the foundation of contemporary American Indian studies. Course covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 515 | The Work and Legacy of Vine Deloria, Jr | Vine Deloria, Jr. Standing Rock Sioux (1933-2005) has often been referred to as "Uncle Vine" for his role in the intellectual development of innumerable scholars, as well as legal and political figures, all of whom have striven along side Deloria at making the world a better and more just place for indigenous communities. As such, Deloria has also been labelled "the Dean of American Indian Studies" because of his work at shaping the intellectual and political agenda, which began in 1969 with the seminal publication of Custer Died for Your Sins: An Indian Manifesto and continued posthumously with works on the medicine man traditions throughout North America and a reflection on Carl Gustav Jung's analyses of American Indian customs and beliefs. This seminar, the first of its kind, takes a comprehensive look at Deloria's philosophical and legalistic legacy by examining his major works and analyzing, in addition to critiquing, the ideas and opinions that shaped his intellectual career. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 516 | Concepts of Power and Indigeneity | Grounds students in the theory and concepts of power and indigeneity with comparisons with global Indigenous peoples and experiences. Through that theoretical understanding, examines and understands ways in which these concepts impact Indigenous communities and formulates ways in which to develop practical ways to address these issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 517 | Customary Tribal Law and Governance | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on customary law, justice, and government. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 518 | Tribal Jurisdiction | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on customary law, justice, and government. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 519 | Burial Rights, Repatriation, and Sacred Places Matters | Probes U.S. laws and policies, court cases, and Indian struggles for dignity, burial rights, repatriation, and religious freedom from the late 1800s to the present. Examines developments in the United Nations and international arena pertaining to Indigenous human rights, religious freedom, repatriation, and sacred places protection. U.S. policies, laws, practices, court decisions, land developers, pot hunters, and archaeologists have restricted the human rights of American Indians in term of burial rights and religious freedom. Congress has enacted cultural resource and environmental protection laws, religious freedom, and reburial laws that aim to regulate the use and abuse of cultural resources and Indian rights. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 521 | American Indian Leadership and Resistance | Examines the modern leadership struggles in American Indian communities with a foundation of traditional concepts of leadership. Topics include leadership qualities and systems pre-contact, federal-tribal relations, state-tribal relations, tribal politics, internal disputes, activism, mobilization, cultural continuity, social change, community leadership, political/elected leadership, diplomacy, political agendas, and other topics related to American Indian leadership and resistance. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 522 | Tribal Governance | Explores American Indian leadership, political ideology, and the history and current state of tribal government. What makes tribal governments tick? Examines past and present challenges faced by leaders and members of indigenous communities. Brainstorms potential strategies for the further enhancement, protection, and assertion of this indigenous "brand" of governance. How do politics, policy development and the ever-changing face of indigenous sovereignty impact the way we think about governance? How can we educate and inspire tribal communities to have greater ownership and interest in government? Students engage with the current research, debate the issues, and learn from people who provide governance to indigenous communities. Case studies focus on specific issues in local communities. Individual portfolio project work facilitates learning and the articulation of leadership and governance as practiced by one particular tribe of your choice. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 523 | Community Development with American Indian Communities | Tribal community development is more complicated than large urban population centers or even rural communities because tribal communities continue to struggle with years of colonial, paternalistic, and assimilationist federal policies that have impeded their efforts to become self-determined and self-governing nations. Provides students with the knowledge and skills they need to support community development in American Indian communities within a self-determined and self-governing context. Content includes: (1) a framework for review of current economic, political, social, and cultural issues facing American Indian communities; (2) an overview of community development theories, of the underlying values behind those ideas, and of the linkages between theory and practices in American Indian and other Indigenous communities; and (3) a sampling of intervention strategies and tactics for effective community development in American Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 524 | Indian Control of Indian Education: Tribal Colleges and Universities | Examines American Indian control of education from a tribal college and university perspective. Focuses on the tribal college movement, including the historical and contemporary political, policy, research, and best practices that have influenced and sustained tribal colleges and universities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| ALA | 100 | Introduction to Environmental Design | Surveys environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Credit is allowed for only ALA or PUP 100 |
| ALA | 102 | Landscapes and Sustainability | Surveys ideas relating to landscapes and sustainability and the role of landscape architecture in the creation of humanized environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| ALA | 121 | Design Fundamentals I | Development of visual literacy. Introduces drawing and graphic representation as methods of seeing and problem solving. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major |
| ALA | 122 | Design Fundamentals II | Exercises in basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): ALA 121 with C or better; Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 124 |
| ALA | 124 | Design Fundamentals II Lecture | Theory and applications of basic design principles, history and theory of how architecture and landscape architecture design is impacted by basic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 122 |
| ALA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALA | 225 | Design Fundamentals III | Applies history and theory of design fundamentals with an emphasis on architectural and landscape architectural design issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: Architecture or Landscape Architecture student; ALA 122 with C or better; Passed milestone; Co-requisite: ALA 235 |
| ALA | 226 | Design Fundamentals IV | Basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: ALA 225 with C or better |
| ALA | 227 | Design Fundamentals III Lecture | History and theory of design fundamentals with an emphasis on architectural and landscape architectural design issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Architecture or Landscape Architecture student; Co-requisite: ALA 225 and ALA 235 |
| ALA | 235 | Introduction to Computer Modeling | Fundamentals of computer operation, geographic information systems, geometric modeling of 3-D forms and rendering of light, mathematical modeling of processes using spreadsheets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major. Corequisite(s): ALA 225 (or EDS 200) |
| ALA | 240 | Sustainable Design in Built Environment | Reviews the physical principles used in the design of sustainable buildings, landscapes, and urban environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| ALA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALD | 101 | Introduction to Aging Issues | Introduces students to general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in midlife and beyond, living options, caregiving, and retirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | |
| ALD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 202 | Field Placement I | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |

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| ALD | 203 | Field Placement II | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202 |
| ALD | 204 | Field Placement III | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202; ALD 203 |
| ALD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 301 | Research Methods in Aging | Examines social science approaches to the study of aging. Includes particular methodological issues that must be considered when studying older adults. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |
| ALD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 404 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 420 | Health Issues and Older Adults | Analyzes and synthesizes the biological, social, and behavioral aspects of health and healthcare delivery in the later adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 420, 520 or FAS 421 |
| ALD | 431 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 431, 531 or FAS 421 |
| ALD | 440 | Social Policy and Aging | Critical analysis and evaluation of the historical, socio-political, and economic issues that are specific to older Americans. Includes federal, state, and local policy issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 460 | Alzheimer's and Related Dementias | In-depth analysis of Alzheimer's disease and related dementias from a caregiver's perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | |
| ALD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ALD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-7 | L | |
| ALD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 505 | Perspectives on Aging and the Life Course | Overview of general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in mid-life and beyond, living options, caregiving, and retirement. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 520 | Health Aspects of Aging Adults | Examines biological, social, and behavioral aspects of health in the later years, and the organization and delivery of care. Includes an emphasis on wellness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); ALD 505 with a grade of C or better, or co-enrolled. Credit is allowed for only ALD 420 or 520 |
| ALD | 525 | Mental Health in Midlife and Beyond | Focuses on the psychological, emotional, and cognitive changes as individuals age. Includes assessment and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 531 | Caregiving Issues for Families and Professionals | Examines the issues of caregiving by family members, in-home aids, and professionals in care facilities. Focuses on issues related to providing care to older adults in a variety of settings. Includes social policy toward caregiving, caregiver stress and reward, the role of social workers, and cultural concerns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre/Co-requisites: ALD 505 with C or better if completed; Credit is allowed for only ALD 431, 531 or FAS 421 |
| ALD | 535 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | REC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 540 | Public Policy Issues and Aging | Examines in detail the historical, socio-political, and economic issues that are specific to older Americans at the federal, state, and local levels. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 545 | Elder Abuse and Neglect | Provides a comprehensive review of crimes against older adults. Includes all types of abuse and neglect, as well as prevention, intervention, and public policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 560 | Dementia | Thorough examination of dementia and dementia syndromes, including Alzheimer's disease. Includes the complexity and diversity of behaviors that define dementia, and implications for planning interventions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ALD 460 or 560 |

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| ALD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | LEC | Y | Z2 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 360 | Renewable Energy Technologies: Fundamentals and Integration | Technical fundamentals, economic, and social aspects of renewable energy technologies with emphasis on solar cells, hydrogen economy, and fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MAT 266; PHY 112; CHM 113 |
| ALT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 401 | Hydrogen Generation, Storage, and Distribution | Overview of primary technologies, economic aspects, and social policy issues related to development of hydrogen systems and hydrogen economy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): ALT 360. Credit is allowed for only ALT 401 or ALT 501 |
| ALT | 405 | Power Conditioning | Fundamentals of power electronics: DC-DC converters and DC-AC inverters; battery charge controllers. Lab experience. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only ALT 405 or 505 |
| ALT | 410 | Solar Cells and Module | Basic device physics and engineering of solar cells. Lab experience on fabrication, characterization, and testing of solar cells and module. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331 |
| ALT | 412 | Village Energy Systems | The role of energy resources in economic development. The need for and use of energy at the Base of the Economic Pyramid (BoP). Individual Problem Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Senior Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum. Credit is allowed for only ALT 412 or ALT 494 (Village Energy Systems) |
| ALT | 420 | Electrochemical Energy Technologies | Thermodynamic and electrochemical principles of fuel cells. Hands-on experience on fabrication and testing of fuel cells; problem solving skills. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: CHM 113; ALT 360 |
| ALT | 435 | Applied Photovoltaics | Overview of solar radiation, operating principles of photovoltaics, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; ALT 410 (not required for BAS students); Credit is allowed for only ALT 435 or 535 |
| ALT | 445 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; CHM 113; Credit is allowed for only ALT 445 or 545 |
| ALT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 502 | Batteries for Portable Electronics | Theoretical and practical overview of primary, secondary, and lithium batteries. Key performance characteristics, construction materials, typical applications, recycling, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 503 | Fuel Cells for Portable Electronics | Overview of electrochemistry, portable electronics industry, principles of fuel cells, and prospects for micro fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 505 | Power Conditioning | Fundamentals of power electronics. DC-DC converters and DC-AC inverters, battery charge controllers. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only ALT 405 or 505 |
| ALT | 506 | Fuel Cell Integration and Packaging | Practical overview of integration and packaging of fuel cell system, which comprises a fuel processor module, a fuel cell module. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 507 | Evaluations of Photovoltaic and Fuel Cell Systems | Field testing, data collection, and evaluation of real-world photovoltaic and fuel cell systems available on campus and data analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ALT | 512 | Village Energy Systems | Establishes leadership in the development of energy resources at the Base of the Economic Pyramid (BoP). Individual Problem-Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum; Credit allowed for only ALT 512 or ALT 598 (Village Energy Systems) |
| ALT | 515 | Alternative Energy Reliability and Standards | Alternative energy systems and their reliability issues, accelerated life and safety testing, standards and codes, regulatory requirements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 519 | Advanced Renewable Energy | Comprehensive evaluation of renewable energy sources from an engineering and policy perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 535 | Applied Photovoltaics | Term projects, overview of solar radiation, operating principles, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only ALT 435 or 535 |
| ALT | 545 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status. Credit is allowed for only ALT 445 or 545 |
| ALT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 101 | ASU Digital Culture Experience | Orientation to the Digital Culture program with emphasis on resources for academic success. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Pre-requisites: Herberger Institute for Design and the Arts BA Digital Culture major; Credit is allowed for only MUE 101 or 194 (ASU Digital Culture Experience) |
| AME | 111 | Introduction to Digital Culture | Examines the effects of digital technology on the way we live, communicate, learn, and create. Proposes that we are moving towards a hybrid (physical-digital) existence and culture. Traces that evolution, looks at current examples of hybrid cultural processes and outcomes, and discusses possible future trends. Discusses how these changes are influencing the work and career possibilities of people involved in all aspects of human culture. Comprises diverse readings, media products, class interaction, group discussion and hands-on collaborative projects exploring concepts covered in class. Also includes a number of guest lectures from ASU faculty. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | CS | Credit is allowed for only AME 111 or 194 (Introduction to Digital Culture) |
| AME | 112 | Computational Thinking for Digital Culture | Introduces fundamental concepts relevant for understanding computation. What are algorithms and how can computer code express them? Basics of how real-world signals are captured, encoded, recorded, retrieved and decoded. Designed for students with little or no background in programming. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 112 or 194 (Computational Thinking for Digital Culture) |
| AME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 385 | Collaborative Projects and Research I | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major; Minimum 45 earned hours; Credit is allowed for only AME 385 or 394 (Collaborative Projects & Research I) |
| AME | 386 | Collaborative Projects and Research II | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 385; Credit is allowed for only AME 386 or 394 (Collaborative Projects & Research II) |
| AME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | |
| AME | 485 | Digital Culture Capstone I | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major or minor or certificate; minimum 45 hours. Credit is allowed for only AME 485 or AME 494 (Digital Culture Capstone I) |
| AME | 486 | Digital Culture Capstone II | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 485; Credit is allowed for only AME 486 or 494 (Digital Culture Capstone II) |
| AME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | | Prerequisite(s): Barrett Honors student |
| AME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-7 | L | |

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| AME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-3 | | |
| AME | 530 | Experiential Media Methodology and Theory I | Engages students in the theory and practice of designing and evaluating experiential media systems. Building on ideas and concepts explored in the companion introductory course, students create and critique a variety of integrated media systems demonstrating technical competence, aesthetic knowledge, analytic rigor and theoretical relevance. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only AME 530 or 598 (Experiential Media Methodology and Theory I) |
| AME | 531 | Experiential Media Methodology and Theory II | Focuses on media arts and sciences in the 20th and 21st century, discussing issues surrounding the definition of the field, media art creation practices, methods of criticism and analysis, interdisciplinary/transdisciplinary work and research, collaboration and current trends. Also focuses on the methodology, theory and history behind the design and development of experiential media systems. Directed toward those interested in researching, designing, building or critiquing experiential media systems that are culturally provocative, socially meaningful and deeply essential. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): AME 530; credit is allowed for only AME 531 or 598 (Experiential Media Methodology and Theory II) |
| AME | 532 | Creating by Algorithm | Focuses on creation of media of all kinds using computation. Using algorithms it is possible to create complex media that is difficult or impossible by traditional methods. Some techniques can capture the unpredictable evolutionary and emergent behavior found in nature. Investigates influential algorithmic methods including stochastic processes and Markov chains, Perlin noise, cellular automata, fractals, L-systems and genetic algorithms. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 533 | Realtime Data Analysis and Pattern Recognition for Interaction | Real-time computing is increasingly used in a variety of settings and scenarios--no more so than in mobile computing. Embedded within our mobile devices are a multitude of onboard sensors, including a three-axis accelerometer, magnetometers, microphones, cameras and GPS. Explores, through the frame of mobile computing, the foundations of employing real-time sensor, visual or audio signals to deliver novel media applications. Introduces computational techniques for classification, detection and recognition of these diverse signal sources through practical example and relevant literature, including signal smoothing, feature extraction, clustering, pattern recognition, neural networks and content classification. Introduces the technical possibilities for such systems as well as the considerations involved in designing and developing real-time solutions. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 541 | Interactive Forms | This course explores how computational models can enhance the form, meaning, and engagement of interactive mediated experiences. Special emphasis is given on how new computational models (stochastic procedures, non-linear dynamics) can be used to mediate the complexity of our current experiences. | N | LEC | N | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AME | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 100 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | MA | Pre-requisites: MAT 117 with C or better or MAT 194: EFM (with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| AML | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 253 | Introduction to Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| AML | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 330 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisites: AML 100 or MAT 142, 170, 210, 265 or 270 with C or better OR Mathematics Placement Test score of 50% or higher; Minimum 56 hours. Credit for only ASB 430, CPI 430, or AML 330 |
| AML | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 406 | Directed Reading and Research in Applied Mathematics for the Life and Social Sciences | Collaborative, practice-oriented course where students produce individual or team-initiated research project reports on pertinent topics in the life and social sciences. Students select topics, design, identify and formulate effective research ideas, and then translate them into clear and effective research plans. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: AML 100 and MAT 342 (or MAT 343); 86 minimum hours |
| AML | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibria in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210(or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| AML | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| AML | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AML | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | L | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AML | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only AML, ESS or SOS 540 |
| AML | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibria in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| AML | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 610 | Topics in Applied Mathematics for the Life and Social Sciences | Introductory course in applied mathematics for the life and social sciences, combined with the first semester of a two-semester course in mathematical biology. Provides a solid introduction to the modeling of biological and social processes as well as to some of the mathematical approaches involved in their analysis and simulation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 611 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AML | 612 | Applied Mathematics for the Life and Social Sciences Modeling Seminar | Presents and applies mathematical modeling principles and techniques for representing the structure and operation of complex life and social systems and processes. Helps students identify potential problems in the life and social sciences and the corresponding mathematical and statistical methods that can be used for their study. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 201 | American Style | Provides an intellectual foundation for the interdisciplinary study of American culture, history, and society. Introduces students to ideas, methods, tools, and theories in the vibrant field of American studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| AMS | 219 | Newspaper Production | Students work on campus newspaper to learn basics of news and column writing, digital photography, and layout. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | |
| AMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 310 | History of American Systems to 1865 | First of a two-part survey of political, legal, and economic institutions, placed in the context of the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AMS | 311 | History of American Systems Since 1865 | Second in a two-part survey of political, legal, and economic institutions, placed in the context of a dynamic industrialist capitalist society, from the age of industrialism and modern America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| AMS | 314 | U.S. Military in Context | Topics in the history and contemporary politics of the U.S. military, including its role in global/transnational affairs. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| AMS | 316 | American Religious Systems | Topics in American religion; may include Hispanic missions of the Southwest. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 320 | American Cultural History I | First of a two-part survey of American culture, broadly defined as historically transmitted patterns of meaning expressed in symbolic forms, including ideas, ideals, the arts, and social and economic standards from the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| AMS | 321 | American Cultural History II | Second of a two-part survey of American culture, broadly defined as historically transmitted patterns of meaning expressed in symbolic forms, including ideas, ideals, the arts, and social and economic standards from the age of industrialism and modern America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| AMS | 322 | Studies in American Literature | Topics in American literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 323 | Studies in American Art and Architecture | Topics in the visual arts and material culture. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 326 | Popular Culture | Topics in American popular culture, including theories of popular culture; the history and analysis of mass media, including television, film, and the music industry; and vernacular art and the folk tradition. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 327 | Regional Cultures | Examines the concept of regionalism and regional cultures in America with a special emphasis on the Southwest/Borderlands. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 330 | Documenting American Lives | Examines American society through the study of autobiography and ethnography. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Pre-requisites: Minimum 45 hours |
| AMS | 332 | Studies in Race and Ethnicity | Topics relating to issues of race and ethnicity in American life. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 334 | American Class | Explores social class and inequality in the U.S. including history, culture, work, politics, globalization, and intersections of gender, race, ethnicity, and place. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: Minimum sophomore standing |
| AMS | 335 | American Biography | Topics in biographies of individuals, comparative biographies, the art of biography, and the function of autobiography. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| AMS | 342 | Writing about American Culture | Teaches methods of writing cultural criticism, emphasizing the essay form. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 344 | Creative Writing | Emphasizes the study and practice of creative nonfiction. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 345 | Reporting | Fundamentals of news gathering, interviewing, and in-depth reporting. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 346 | Editing | Theory and practice of editing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 351 | Technical Writing | Computer-based instruction in writing documents for online, oral, and print formats, focusing on audience-centered rhetoric. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 412 | Studies in American Politics & Law | Topics in American political and legal systems, including social movements in the United States and women and the law. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 414 | Military Studies | Topics in the history of the American military. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 417 | Religious Traditions of the American Southwest | Examines the sacred traditions that have evolved within the North American Southwest context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| AMS | 422 | Studies in American Literature | Topics in American literature, including contemporary American comic fiction, literature of the American South, literature of American wars, Hispanic chronicles of the Southwest, literature of la Chicana, and American rhetoric. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 428 | Chicano Cultures in the Southwest | Examines and explores Chicana and Chicano culture as place and sentiment. The physical place and space and the sentiment related to Chicanas and Chicanos. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Credit is allowed for only MAS 598 (Chicano Cultures) or AMS 428 |
| AMS | 429 | Interdisciplinary Topics | Senior-level seminar that examines issues relevant to two or more American cultures' fields. Topics may include Southwest/border, Hispanic folklore, Southwestern corridors, American art and the city, and the West of the imagination. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 431 | Gender Studies | Topics relating to issues of gender in American life. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

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| AMS | 432 | Studies in Race and Ethnicity | Topics relating to issues of race and ethnicity in American life. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 490 | Writing Certificate Portfolio | Preparing a portfolio demonstrating advanced writing skills. Limited to and required of students in the Writing Certificate Program. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | |
| AMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 101 or 105 with C or better; AMS 301 with C or better |
| AMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMT | 101 | Introduction to Aeronautical Management Technology | Facilitates entry into aeronautical management technology programs. Emphasizes General Catalog, major and concentration requirements, registration, careers, and Polytechnic campus resources. Introduces various learning styles and strategies that assist students in becoming successful learners. Emphasizes time management techniques and academic integrity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | |
| AMT | 105 | Private Pilot Operations and Safety | Supervised private pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for private pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and FAA Practical Exam(s) within the appropriate flight training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students following the single engine flight training track earn their Single Engine Private Pilot certificate. Students following the multiengine flight training track earn their Single Engine Private Pilot Certificate and their Multiengine Private Pilot certificate. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre-requisites: Professional flight program secondary application; Pre/Co-requisite: AMT 182 and AMT 220 with C or better if completed |
| AMT | 110 | Flight Operations & Safety II | Concludes supervised private pilot operations and flight training and introduces students to supervised commercial pilot operations, flight training, flight safety briefings, and recurrent aviation subjects appropriate for private and commercial pilots. Flight instruction costs are not included in university tuition and fees. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 105 with C or better; Pre- or corequisite(s): AMT 222 with C or better if completed |
| AMT | 150 | Flight Operations & Safety III | Continuation of supervised instrument pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for instrument pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and the FAA practical exam within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Instrument Rating. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 110 with C or better |

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| AMT | 170 | Introduction to Unmanned Aircraft Systems | Introduces the history of unmanned aircraft systems and current and future developments in civil and military operations. Specific blocks deal with elements that form an unmanned aircraft system: unmanned vehicles, communication, navigation, launch and recovery, control stations, payloads, and support equipment. Explores other current issues in unmanned aircraft operations: aviation regulatory system and integration, safety and human factors, ethical and legal issues, and the future unmanned aircraft systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 182 | Private Pilot Ground School | Ground school preparation for Private Pilot Certificate. Aerodynamics, navigation, performance, and regulations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 201 | Air Traffic Control | Ground and air operations; weather services communications and routing; flight plans, IFR operations, departures and arrivals; and airport conditions and emergencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: BAS Applied Science (Aviation Management Technology) OR BS Aeronautical Management Technology OR BS Air Traffic Management major |
| AMT | 205 | Flight Operations and Safety IV | Continuing introduction to commercial pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight syllabus topics, student handbook/general operations manual, monthly safety and informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 150 with C or better |
| AMT | 210 | Flight Operations and Safety V | Covers instrument pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight topics, student handbooks, operations manual, monthly safety meetings, informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 205 with C or better |
| AMT | 214 | Commercial/Instrument Ground School I | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 1 of 2). 10 hours ground trainer included. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 182 and 220 with C or better |
| AMT | 220 | Aviation Meteorology | Evaluation, analysis, and interpretation of atmospheric phenomena. Low- and high-altitude weather from the pilot's viewpoint. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 222 | Instrument Pilot Ground School | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 2 of 2). 10 hours ground trainer included. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 105 and AMT 182 with C or better, OR nonmajor: AMT 182 with C or better |
| AMT | 250 | Flight Operations and Safety VI | Continuing introduction to commercial pilot flight operations and begins to introduce the student to certified flight instructor flight operations. Primary activities include flight instruction, lecture and discussion of the current flight syllabus topics, handbooks and general operations manual as well as monthly safety and other informational briefings. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 210 with C or better |
| AMT | 270 | Unmanned Aircraft | Introduces elements comprising the unmanned aircraft system (UAS). Includes review of UAS, Unmanned Aerial Vehicle (UAV); system development and certification, selection and design, aerodynamics and airframe configurations, characteristics of vehicle types, design standards and regulatory aspects, airframe design, payload types, and control and stability. Students apply concepts acquired in classroom sessions and construct various unmanned aircraft, train to operate using existing simulators, and conduct flight-testing. The final course project is the design, development and construction of a group 1 unmanned aircraft, serving as the core unmanned vehicle used in subsequent UAS courses. Incorporates UAS data collection and analysis throughout the course. Course concepts enable UAS student pilots to become knowledgeable of aerodynamic aspects of UAV to ensure safety of flight and improved maneuverability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 170 with C or better |
| AMT | 280 | Aerospace Structures, Materials and Systems | Basic aerodynamics, incompressible/compressible airflow, wind tunnel testing, wing theory; analysis of aircraft structures; properties and applications of materials, and aircraft systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre- or corequisite(s): PHY 111, 113 |
| AMT | 285 | Flight Instructor Ground School | Ground school in preparation for the FAA Flight Instructor Certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s) with C or better: AMT 150, 214 |
| AMT | 286 | Multengine Pilot Ground School | Ground school preparation for the FAA Multiengine Rating. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre- or corequisite(s): AMT 150 with C or better if completed; Aeronautical Management Technology (Professional Flight) major |
| AMT | 287 | Aircraft Powerplants | Theory and performance analysis of gas turbine and reciprocating aircraft engines. Engine accessories, systems, and environmental control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre/Co-requisite: PHY 111 or PHY 121 |

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| AMT | 292 | Flight Instructor Instrument Ground School | Ground school preparation for the FAA Instrument Flight Instructor Rating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 205 and 222 with C or better; AMT 285 or 385 with C or better |
| AMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 305 | Commercial Pilot Operations and Safety | Continuation of supervised multiengine commercial pilot operations, introduction of single engine commercial pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for commercial pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Commercial Multiengine and Commercial Single Engine certificates. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre-requisites: Aeronautical Management Technology Professional Flight major; AMT 250 with C or better |
| AMT | 308 | Air Transportation | Studies the historical and international development of air transportation and its social, political, and economic impact upon global interrelationships. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | G | Pre-requisite: Minimum 50 hours |
| AMT | 310 | Flight Operations and Safety VIII | Covers certified flight instructor instrument (CFII) and multiengine flight operations. Flight instruction, lecture and discussion of the current flight topics, student information handbooks, general operations manual (GOM), monthly safety, informational briefings. Requires enrollment in appropriate flight operations and safety course while engaging in flight training activities. Flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 286 and 305 with C or better. Pre- or corequisite(s): AMT 292 (or AMT 392) with C or better if completed |
| AMT | 350 | Aircraft Design and Logistics Management | Fundamental aircraft design principles, including performance factors associated with mission profiles and the identification of basic logistical support requirements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 280 with C or better; Pre/Co-requisite: AMT 287 with C or better if completed |
| AMT | 370 | Unmanned Aircraft Systems | Students build upon gained knowledge, skills and experience by exploring unmanned aircraft avionics, autopilot systems, first person video (FPV), on-screen displays (OSD), communication systems, command and control (C2), ground control stations (GCS), flight software, and UAV launch and recovery systems. Students continue flight training and gain proficiency in unmanned aircraft operation using simulators and hands-on flight-testing. Students demonstrate their abilities to upgrade and modify their previously constructed unmanned aircraft in order to operate and conduct actual flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 270 with C or better |
| AMT | 382 | Air Navigation | Theory and application of modern advanced navigation and flight instrument systems. Introduces crew resource management in multiplace cockpits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 250 with C or better; Minimum 64 hours |
| AMT | 391 | Multiengine Instructor Ground School | Ground school preparation for the FAA Multiengine Flight Instructor Rating. Integrated lecture/lab. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 2 | | Pre-requisite: AMT 250 and 387 with C or better |
| AMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 396 | Aviation Professional | Career focus for management and flight students, including internships, writing, interviews, and employment search in aviation industry. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): BAS or BS aviation program major; junior standing |
| AMT | 401 | Multiengine Instructor Rating | Normal and emergency flight operations. Instruction techniques and procedures for light multiengine land, airplane. CFI/AME Rating required for course completion. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | |
| AMT | 408 | National Aviation Policy | Examines aviation and airspace policies and policy process, including agencies involved in formulation, implementation, and evaluation of aviation policy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 410 | Aviation Safety and Human Factors | Aviation accident prevention, human factors, life support, fire prevention, accident investigation, and crash survivability. Development and analysis of aviation safety programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 182 with C or better; AMT 308 with C or better |
| AMT | 442 | Aviation Law and Regulations | Aviation within context of U.S. Common Law system. Public law, administrative rule making, sovereignty, enforcement, and case law analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): minimum 50 hours |
| AMT | 444 | Airport Management and Planning | Orientation to administration and management of modern public airports, including overview of planning, funding, and development of airport facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 456 | Introduction to Organized Labor | Introduces labor relations, unions, federations, collective bargaining, grievances, and labor legislation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| AMT | 470 | Unmanned Aircraft Payloads, Sensors, and Control Stations | Builds on previously gained knowledge and experience. Student pilots utilize long-range communication and data links, UAS sensors, geospatial data collection, and still-imaging mosaicking. Students continue flight training using existing simulators and flight-tests during the course. Students apply concepts acquired during classroom sessions and construct a ground control station, modify and upgrade existing unmanned aircraft with payloads/sensors, train to operate sensors using existing simulators, and conduct flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 370 with C or better |
| AMT | 482 | Airline Instrument Procedures | Advanced instrument flight using airline instrument procedures and airline crew and cockpit resource management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 382 with C or better |
| AMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Pre-requisite: AMT 308 with C or better |

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| AMT | 486 | Regional Jet Aircraft Systems | Regional jet airline aircraft systems and flight procedures. Includes theoretical education for regional jet commercial passenger aircraft. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 382 with C or better; Aeronautical Management Technology (Professional Flight) student |
| AMT | 488 | Regional Jet Aircraft Systems II | Regional jet systems, with emphasis on air navigation systems, including Flight Management System (FMS), Selective Calling (SELCAL), and flight profiles. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: Aeronautical Management Technology (Professional Flight) student; AMT 382 with C or better |
| AMT | 489 | Airline Administration | Administrative organizations, economics of airline administration, operational structure, and relationship with federal government agencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Minimum Junior status; AMT 308 with C or better |
| AMT | 490 | Regional Jet Operations Capstone | Regional jet aircraft operations and flight procedures. Includes theoretical education for RJ aircraft, FTD and full-motion simulator time. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s) with C or better: AMT 205, 482, 486, 488; Aeronautical Management Technology (Professional Flight) major |
| AMT | 491 | Aviation Management Capstone | Integrated group project with industry partner to address current problems in either air carrier or airport management focus area. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): junior standing. Pre- or corequisite(s): AMT 489 with C or better if completed |
| AMT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Pre-requisite: Minimum 2.25 GPA |
| AMT | 495 | Unmanned Aircraft Systems Operations | Capstone course applies student pilots' knowledge and skills gained in previous UAS courses to safely deploy a UAS in response to real-world situation or research. Students collaborate with other university departments, state or federal agencies, and other organizations and conduct actual or simulated missions in geospatial data collection, search and rescue, and near-space operations. Course blocks include flight planning and preparation, aircraft preflight and maintenance, launch and recovery operations, payload operations, normal and emergency procedures, and mission planning and execution. Students continue flight training using existing simulators and flight-tests. Students use real-world situations which require deployment of equipment and systems developed during previous course. Places specific emphasis on aircraft and payload selection based upon proposed mission analysis. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 470 |
| AMT | 496 | Airline Aircraft Systems Capstone | Commercial airline aircraft systems and flight procedures. Includes theoretical education for large, commercial passenger aircraft. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-7 | L | |
| AMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-3 | | |
| AMT | 520 | Airline Pricing and Yield Management | Airline economics at the operating level; historical and current operational strategies; demand, traffic, price, yield, revenues, and costs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 521 | Air Transportation Regulation | Reviews evolutionary history of government regulations. Explores alternatives for economic, safety, social, and administrative regulatory reform in air transportation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Schools of Engineering with a University Cum GPA 3.0 or greater |
| AMT | 522 | Aviation Law | Examines the U.S. legal system with a focus on the aviation perspective, administrative agencies, FAA enforcement, and case law. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 523 | Intermodal Transportation Management | Systems theory applied to intermodal transportation networks. Surveys air and ground transportation infrastructure, institutional frameworks, and intermediaries promoting connections between modes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Schools of Engineering with a University Cum GPA 3.0 or greater |
| AMT | 524 | Airport Management and Operations | Overview of planning, funding, and development of airport facilities; legal and ethical considerations associated with airport management operations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 525 | Airport Planning and Design | Completion of various phases of airport master planning process. Provides guidance for logical and timely development of airports. Project work groups assigned. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 526 | Aviation Labor Relations | Investigates labor-management relations in the aviation industry, including laws, unionism, collective bargaining, public sector relationships, grievance procedures, and conflict. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 527 | Airline Management Strategies | Since deregulation, airlines have undergone profound changes through mergers, consolidation, and acquisition. In-depth look at airline management strategies for the 21st century. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 528 | International Aviation | Major issues of international aviation, historical review of institutional framework. Bilateral route agreements, freedom versus sovereignty, current legal and political arrangements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Polytechnic School with a University Cum GPA 3.0 or greater |
| AMT | 529 | Fixed-Base Operations Management | Examines FBO role in the national aviation system. Organization of flight line operations, aircraft maintenance, and administration for multiple aircraft types. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Polytechnic School with a University Cum GPA 3.0 or greater |

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| AMT | 532 | Managing Diversity in Aviation | Examines group identity and cognitive styles, cross-cultural issues, language and diversity, and effects of aviation culture on management of diversity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 533 | Training Systems & Simulation | Provides an overview of simulation and its various uses in aviation instruction. Three main focus areas: simulation, learning and human performance, instruction and evaluation of instructional effectiveness. Focuses on research findings in these areas and practical application and implementation of simulation to improve learning and performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 534 | Airline Pricing and Yield Management | Focuses on the fundamentals of airline economics and the volatility of industry performance at the operating level. Topics include the structure of the airline industry and the various historical and current operational strategies; demand, traffic, price and yield; operating revenues and operating costs. The airline industry is affected by various economic, environmental, political and regulatory conditions. Reviews the implications of these conditions on airline pricing, capacity, fleet selection and scheduling. Analyzes current and predicted future conditions to develop potential strategies for successful revenue management within the industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: degree- or nondegree-seeking graduate student. Credit is allowed for only AMT 534 or AMT 598 (Airline Pricing and Yield Management) |
| AMT | 541 | Aviation Physiology | Surveys human physiology and human performance principles related to modern aircraft and aircraft systems operating in multiple environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 542 | Human Factors in Automation | Examines human factors issues associated with automation. Includes impact of automation design, workload, stress, and system complexity on human operators. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 545 | Human Factors in Aviation | Overview of human role in aviation. Issues, problems of unsafe acts and attitudes in human behavior. Human engineering capabilities and limitations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Polytechnic School with a University Cum GPA 3.0 or greater |
| AMT | 546 | Crew Resource Management/Line-Oriented Flight Training | Evaluates in-depth, multicrew coordination issues for commercial aviation pilots. Stresses importance of critical thinking, decision making, integrated resource utilization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 549 | Applied Human Factors Research | Aviation human factors research principles applied and tested in operational settings. Group projects assigned in conjunction with industry partners. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Polytechnic School with a University Cum GPA 3.0 or greater |
| AMT | 565 | Safety in Complex Systems | Evaluates human error in aerospace systems. Discusses different theories of error and taxonomies as well as safety management systems to help identify hazards and risks and then help mitigate and/or eliminate them. Extensively uses case studies to highlight human failures as well as demonstrate organizational changes that resulted in safe and successful operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 570 | Unmanned Aerial Systems | Examines the system design, operations and employment of unmanned aerial systems (UAS), beginning with an overview of the system and human factors and specific issues involved with UAS design and operations. Communication, remote operations, operator display interface, and situational awareness and teamwork required for successful employment. Evaluates accident data to understand technology and human error concerns. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| ANB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 601 | Research Strategies in Animal Behavior | Using hands-on experiences, teaches key concepts underlying the control and function of animal behaviors and contemporary methods for measuring, analyzing, and reporting animal behaviors. Combines introductory classroom lectures on concepts and methods with direct application in observations and experiments on animal behavior in the field and the lab. Topics include communication, mating behavior and systems, parental care, kin selection, cooperation and competition, migration and dispersal, foraging, and anti-predator strategies. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 602 | Current Issues In Animal Behavior | Student-led seminar course centers on discussions of contemporary literature in the field of animal behavior. Takes a student-driven approach, with course participants selecting a target theme for the semester, selecting individual papers to discuss each week, and leading discussions about relevant merits and shortcomings of each article. Additional topics may include: conceptual frameworks and results from the dissertation projects of participating students; career options and strategies in the behavioral sciences; responsible research conduct in the field, and tactics in manuscript publication and grantsmanship. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ANB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 194 | Special Topics | | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 475 | Computer Programming in Architecture | Computer programming for architectural problems and applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| ANP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ANP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ANP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ANP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| ANP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design (Energy Perform/Bldgs) MS, Building Design (Facilities Dev/Mgt) MS or Building Design (Knowledge/Compng) MS student |
| ANP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |

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| ANP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |
| ANP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design Knowledge and Computing MS student ANP 592 with a grade of Y |
| ANP | 681 | Project Development | Defines and elaborates on major ideas for implementation in ADE 622 in relation to contemporary theory and practice. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student |
| ANP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design Knowledge and Computing MS student |
| APA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisite: Freshman status |
| APA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 200 | Introduction to Asian Pacific American Studies | Examines historical and contemporary issues facing Asian Americans and Pacific Islanders in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | |
| APA | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| APA | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| APA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 310 | Asian Pacific American Arts and Cultures | In-depth exploration of Asian Pacific American cultural expression in art, literature, film, theatre, dance, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or minimum 30 hours. Credit is allowed for only APA 310 or FMS 310 |
| APA | 315 | Asian Pacific American Literature | In-depth exploration of the literary history, critical reception, and major theories in Asian Pacific American poetry, fiction, and prose. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or 210 or 30 minimum hours |
| APA | 330 | Asian Pacific American Genders and Sexualities | In-depth exploration of gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites: APA 200 or 210 or 30 minimum hours. Credit is allowed for only APA 330 or WST 331 |
| APA | 340 | Asian Pacific Americans and Media | Advanced study of the social construction of Asian Pacific American media images and resistance to those images in various historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| APA | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| APA | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| APA | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |

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| APA | 360 | Asian Pacific American Experience | Advanced study of the historical and contemporary experiences of Asian Pacific American racial/ethnic groups in the United States. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours. Credit is allowed for only AFR, APA, JUS or SST 428 |
| APA | 450 | Asian Pacific American Contemporary Issues | Advanced study of the issues shaping Asian Pacific American communities, including immigration, politics, education, health, family, gender, youth, interracial relations, and other contemporary topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |
| APA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| APA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |
| APA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | |
| APA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| APA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 212 | Culture of Place | Explores contemporary conditions in the built environment as they are shaped by cultural phenomena. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| APH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 300 | World Architecture I/Western Cultures | Historical and contemporary built environments of Western civilizations: Mediterranean, Europe, and the Americas as manifestations of cultural history and responses to environmental determinants. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2-3 | HU & H & G | Pre-requisite: May not be Pre-Architectural Studies or Architectural Studies BSD student |
| APH | 305 | Contemporary Architecture | Europe and America from the foundations of the modern movement to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: Non-majors only (non-architecture students) |
| APH | 313 | History of Architecture I | Intensive study of history of architecture from earliest traces to 1300. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: Architectural Studies major with ALA 100 or ALA 102 and passed degree milestone review or non-majors with junior standing |
| APH | 314 | History of Architecture II | Intensive introduction to history of architecture from roughly 1300 to present day. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: APH 313 with C or better |
| APH | 336 | 20th-Century Architecture I | Architecture in Europe and America from the foundations of the modern movement to the culmination of the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites: Minimum Junior standing or Digital Culture: Design major |
| APH | 337 | 20th-Century Architecture II | Developments in architecture since the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisite: APH 336 |
| APH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 414 | History of the City | The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as analytical essays and an in-depth research paper are required in addition to regular tests and quizzes. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & H | Pre-requisites: PUP 301; Minimum 45 hours; Credit is allowed for only APH 414, MUD 598 (History of the City) or PUP 412 |
| APH | 421 | First Concepts: What is... The Writing, Philosophy, and Culture of Architecture | Examines the major writings and concepts that surround the history of architecture. Focuses on (but not exclusively) work in the 20th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L or HU | Pre-requisites: APH 313 & APH 314 with C or better; Architecture or Digital Culture Design student |
| APH | 441 | Ancient Arch | Architecture of the ancient Mediterranean world with selective emphasis on major historical complexes and monumental sites. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| APH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| APH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| APH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| APH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 505 | Foundation Theory Seminar | Foundation of conceptual architectural inquiry, stressing the reciprocal and interdependent relationship between design and theory. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisites: ADE 522, ATE 556 |
| APH | 509 | Foundation Seminar | Historical, technical, theoretical, environmental, and professional issues in architecture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture; Co-requisite: ADE 510 |
| APH | 511 | Energy Environment Theory | Solar and other energy sources in designed and natural environments; architectural, urban, and regional implications of strategies using other renewable resources. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Architecture, Master of Urban Design or Building Design MS student |
| APH | 515 | Current Issues and Topics | Critical examination of current architectural issues, topics, and discourse. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: APH 505 with a C or better; Co-requisite: ADE 621 |
| APH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 581 | Contemporary Urban Design | Explores contemporary city and urban design issues related to contemporary cities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |
| APL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only SHS 588 or APL 588 |
| APL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 601 | Introduction to Applied Linguistics | Overview of the field of applied linguistics. Applies linguistic knowledge to the resolution of language-related issues facing multilingual societies (e.g., second language acquisition and ultimate attainment, literacy, language assessment, bilingualism, heritage and indigenous languages, language attitudes, language planning and policy, language and politics, world Englishes). | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 501 | Differential Equations I | Linear and nonlinear ordinary differential equations. Existence and uniqueness of solutions, limit sets, stability, Lyapunov functions, linear systems with constant coefficients. Geometry of behavior in two and three dimensions, including Poincare-Bendixon theorem, Lorenz equations, linearization, sensitive dependence on initial conditions, bifurcations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 502 | Differential Equations II | Partial differential equations, including classification, method of characteristics, separation of variables, boundary value and initial value problems, Green's functions, maximum principle, distributions, and weak solutions. Students must have already taken or be concurrently enrolled in Differential Equations 1. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 503 | Applied Analysis | Convergence sequences and series of functions; metric space topology, compactness, completeness and the Ascoli-Arzelà Theorem; Contraction Mapping Principle, Implicit Function Theorem; intro to Lebesgue integration leading to L^p spaces; properties of Hilbert spaces, Fourier transform. Students should have knowledge of linear algebra, multivariable calculus, and analysis at the undergraduate level. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 504 | Applied Probability and Stochastic Processes | Markov chains, Martingales, probability measures, SDE, Brownian motion, Monte Carlo methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 505 | Applied Linear Algebra | Fundamentals of linear algebra and numerical linear algebra, including decompositions (LU, QR, SVD), Eigen values, spectral theory, least squares problems. Programming with MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 506 | Computational Methods | Covers interpolation, solution of nonlinear equations and systems, numerical differentiation, numerical integration, numerical solution of ordinary and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 520 | Advanced Numerical Linear Algebra | Extends topics of APM 505. Introduces essential iterative methods, Gauss-Seidel, conjugate gradients. Methods for SVD, total least squares and root-finding applications in image analysis. Students should have basic knowledge of numerical linear algebra and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 521 | Numerical Analysis for Ordinary Differential Equations | Stability, accuracy, consistency, RK methods, finite differences, linear partial differential equations, dispersion, dissipation, method of lines. Applications and programming. Students should have had a previous graduate course in ODE or applied analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 522 | Numerical Methods for Partial Differential Equations | Numerical methods for parabolic, elliptic, and hyperbolic partial differential equations, including finite difference/volume, finite element, and spectral methods. Mathematical concepts of stability, consistency, and convergence. Applications to scientific, biomedical, and industrial problems. Students should have a basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 523 | Optimization | Building on a fundamental undergraduate background in linear algebra and calculus, covers continuous optimization, constrained/unconstrained and linear/nonlinear, as well as selected topics in discrete optimization. Some programming experience is needed for course projects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 524 | Spectral Methods | Extends approximation theory to global methods, including Fourier and orthogonal polynomial expansions. Applications to imaging and hyperbolic, parabolic, and elliptic partial differential equations. Students should have previous graduate courses in ordinary and partial differential equations, basic programming skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 525 | High-Performance Computing | Supercomputer architectures, parallel programming environments, languages, libraries, and algorithms for high-performance numerical simulations. Instructor/Department approval is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only APM 525, MAE 494 (High-Performance Computing) or MAE 598 (High-Performance Computing) |

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| APM | 526 | Advanced Numerical Methods for Partial Differential Equations | Partial content will vary from semester to semester, but may include hyperbolic conservation laws, finite element methods, multigrid methods, and parallel algorithms for partial differential equations. Applications to scientific, biomedical, and industrial problems. Students should have basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 530 | Mathematical Cell Physiology | Mathematical modeling of dynamical aspects of cell physiology. Diffusion, membrane transport, intracellular calcium channel kinetics, calcium oscillations and waves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 531 | Mathematical Neuroscience I | Mathematical modeling of electrochemical processes in nerve cells. Dendritic modeling, dendritic spines and synaptic plasticity, bifurcation analysis of excitable membrane models, deterministic and stochastic methods for threshold dynamics and bursting, relaxation oscillations. Students should have had a previous graduate-level PDE course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 532 | Mathematical Neuroscience II | Mathematical modeling of systems neuroscience. Network dynamics, coupled phase oscillators, central pattern generators, neural coding, learning and memory. Students should have taken ordinary differential equations or mathematical cell physiology or mathematical neuroscience prior to enrolling in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 533 | Mathematical Population Biology I | Selectively covers population biology models in the forms of systems of difference equations or ordinary differential equations. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous graduate-level course in ODE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 534 | Mathematical Population Biology II | Selectively covers population biology models in the form of partial differential equations and systems. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous basic graduate-level course in ODE and PDE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 535 | Mathematical Models in Medicine | Mathematical models for the etiology, epidemiology, pathogenesis, morphology and treatment of disease. Covers dynamical models of cancer and viral infections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 541 | Stochastic Modeling in Biology | Markov processes, random walks, martingales, branching processes, logistic growth model, Wright-Fisher model, Kingman's coalescent, bound and site percolations, contact processes, voter models. Students should have previously taken course work in probability and/or stochastic processes (or have a recommendation from their advisor). Recommendation from advisor is typically for students in biology or physics that have not taken statistics courses but have a good background in mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 553 | Dynamical Systems | Center manifolds, structural stability, normal forms, averaging, chaos, control and synchronization. Students should have a previous graduate course in ODE or applied analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 560 | Applied Dynamical Systems | Bifurcations, normal forms, pattern formations, mixing, Lagrangian chaos, and applications to fluid dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 561 | Nonlinear Analysis of PDEs in Fluids | Sobolev spaces; incompressible Euler and Navier-Stokes equations; weak and strong solutions; attractors and the connection with turbulence; geophysical applications. Completion of a course in Differential Equations II is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 570 | Applied Linear Operators | Bounded linear and compact operators on Hilbert spaces; Linear integral equations, Fredholm and Hilbert-Schmidt theory, and approximate methods. Distributions. Completion of a course in Applied Analysis is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 575 | Perturbation Methods in Applied Mathematics | Regular and singular perturbation methods for ordinary and partial differential equations. Boundary layer theory, matched asymptotic expansions, multiple-scale, homogenization, and WKB methods. Application to nonlinear oscillations, bifurcation and stability problems. Completion of a course in Differential Equations II or Partial Differential Equations in Engineering is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: APM 502 or MAE 502; Credit is allowed for only APM 575 or MAE 505 |
| APM | 576 | Theory of Partial Differential Equations I | Existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 577 | Theory of Partial Differential Equations II | Continuation of existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): APM 576 |
| APM | 581 | Geometry and Control of Dynamical Systems I | Manifolds, tangent and cotangent bundle, Lie theory, integrability and controllability, and feedback control. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 582 | Geometry and Control of Dynamical Systems II | Variational principles, Euler-Lagrange equations, Hamiltonian systems, optimal control, connections and curvature. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| APM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP4 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AR | 461 | Adv Ceramics I | | Y | LEC | Y | CNV | Herberger College of the Arts | School of Art | 3 | | |
| ARA | 101 | ASU: The Art Experience | Introduces the culture, challenges and opportunities of the School of Art. Addresses essentials for academic and personal success within the university. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 1 | | Credit is allowed for only ARA 101, 194 (ASU Art Experience) or HDA 194 (ASU Herberger Inst Experience) |
| ARA | 110 | Sculpture Safety | Introduces safety and environmental health in the sculpture studios. Pre- or corequisite for all sculpture classes. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 1 | | |
| ARA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 195 | Art in My World | Basic concepts and fundamental questions that provide insights into art making and that affect one's understanding and appreciation of art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARA | 202 | Understanding Photographs | Slide lecture course in understanding photography as a fine art form. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARA | 218 | Art and Visual Learning | Broad-ranging introduction to art and the visual world, focusing on art and artifacts from diverse cultures and eras, various two- and three-dimensional media, meaning and purpose in art, as well as community and internet art resources. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ARA 218 or 294 (Art and Visual Learning) |
| ARA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 309 | Photography Now | Explores contemporary practice through lectures, readings, exhibition visits, screenings and discussions. Explores work created within the past thirty years up to the present. Students act as a collective "ear to the ground" for the medium, engaging in first-hand experiences and research and being responsible to share those experiences with the class as active agents of discovery. Requires reading current periodicals, attending and discussing photographic lectures and exhibitions both in-class and beyond within the local community. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 2.00 GPA; minimum 45 hours. Credit is allowed for only ARA 309 or 394 (Photography Now) |
| ARA | 311 | Art Appreciation and Human Development | Foundations of art for children and young adults. Emphasizes learning, development, and understanding art in historical and cultural contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-ART student; ENG 101; ENG 102; Minimum Junior standing |
| ARA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 396 | Professional Practices for Artists | Prepares the young artist to successfully enter the professional world of art and culture beyond the support system of the university. Through examining contemporary artists' models of practice and creative entrepreneurship, participating in hands-on exercises, field trips, engaging with guest lecturers from local cultural institutions and initiatives, student artists learn how they can shape their lives to sustain their artistic practice once they graduate. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: 40 minimum hours; Credit is allowed for only ARA 394 (Marketing for Artists) or 396 |
| ARA | 460 | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ARA 460 or 560 |
| ARA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARA | 488 | Understanding Art | Understanding art as an emergent cultural phenomenon with an emphasis on a critical examination of conceptual issues in art. Writing required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L or HU | Pre-requisites: ARS 101; ARS 102 |

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| ARA | 489 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 45 hours; Credit is allowed for only ARA 489 or 494 (Writing Art and Design Criticism) |
| ARA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 560 | Gallery Exhibitions | Provides practical experience in all phases of art gallery operations. Students learn professional art gallery practices through hands-on experience in the School of Art Student Galleries including Harry Wood, Step, and Gallery 100. Class members assist BFA and MFA candidate students in many phases of exhibition preparation and execution as well as assist with the curation and design of group exhibitions. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARA 460, 560 or 598 (Gallery Exhibitions) |
| ARA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 589 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person, analyzing and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or non-degree seeking). Credit is allowed for only ARA 489 or ARA 589 or ARA 598 (Writing Art & Design Criticism) |
| ARA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARA | | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ARA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARA | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| ARA | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 101 | Elementary Arabic I | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| ARB | 102 | Elementary Arabic II | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| ARB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 24 earned hours |

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| ARB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 201 | Intermediate Arabic I | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ARB | 202 | Intermediate Arabic II | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ARB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 311 | Advanced Arabic Skills I | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 321 | Arabic Conversation I | Emphasizes spoken Arabic and conversation skills. Simultaneously develops communicative skills, vocabulary, and cultural awareness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 331 | Arabic/Islamic Culture and Literature | General introduction to the Middle East that synthesizes cultural, social, and literary information. Focuses on the experiences of ordinary Middle Eastern people to convey a grassroots sense of the Middle East. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 335 | Arabic Culture and Islam | Develops awareness of Arabic culture and Islam. Covers a variety of cultural topics, including family, status of women, food, music, and Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| ARB | 336 | Introduction to the Qur'an | Introduces the Qur'an and examines the historical, contextual, religious and interpretive dimensions wherein the Qur'an developed. Deals with the structure of the Qur'an, the different sections, suras (Qur'anic chapters), and some of the verses. Also includes an introduction to the idea of revelation, its history, the content and some of the different themes of the Qur'an, and discusses aspects of the Qur'an as a source of law. Taught in English; requires no knowledge of Arabic or Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better; Credit is allowed for only ARB 336 or 394 (Introduction to the Qur'an) |
| ARB | 337 | Hadith and Prophetic Tradition | Considers the Hadith as a literary text and as the prophetic tradition in Islam. Focuses on the development of the Hadith as a vast subject in Arabic literature, its collection methodology, Hadith science, and its contents. Gives special attention to the relationship of the Hadith as the second source, after the Qur'an, of Islamic knowledge, Islamic theology, Islamic philosophy and Islamic law. Explores the various ways and approaches in which Muslims employ the Hadith along with the Qur'an in their search for meaning, identity and knowledge. All readings are in English; requires no prior knowledge of Arabic language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better; Credit is allowed for only ARB 337 or 394 (Arabic Hadith and Prophetic Tradition) |
| ARB | 341 | Quran Text and Women | Addresses Muslim women scholars' argument that it is not the religion but the patriarchal interpretation of the Quran that have kept Muslim women oppressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 351 | Classical Arabic Literature | Provides a survey in classical Arabic literature. Focuses on the development of classical Arabic poetry and prose since their interceptions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 352 | Modern Arabic Literature in Translation | Surveys the major trends, themes and genres of modern Arabic literature in translation. Provides a foundational knowledge of modern literature in the Arabic language. Focuses on continuity and change, cultural diversity and multiplicity in the Middle East, and the social, religious and historical aspects of modern Arab culture. No knowledge of Arabic language is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only ARB 352 or 394 (Introduction to Modern Arabic Literature) |
| ARB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 411 | Advanced Arabic Skills II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 421 | Arabic Conversation II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ARB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |

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| ARB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARE | 250 | Teaching Inquiry in Art | Issues in teaching and learning through directed, guided, and independent inquiry about artworks and through art making. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 101, ARS 102, and 6 hours (2 classes) from ART 111, 112, 113 or 115 with a C or better or currently enrolled |
| ARE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 301 | Studio Art and Human Development | Study of human development in studio art from early childhood to adult years. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARE | 370 | Teaching Visual Culture | Explores issues and applications of everyday aesthetics that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA or BFA Art major: ARE 250 OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 or ARS 102; ART 110; ART 112 (or ART 113, 115 or 116) |
| ARE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 440 | Interdisciplinary Art Education | Explorations in art education's disciplines, history, and people's artmaking development at diverse age levels and abilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BIS Interdisciplinary Studies (Studio Art concentration) or Herberger Institute major or Studio Art minor; minimum 2.00 GPA; minimum 55 hours |
| ARE | 446 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |
| ARE | 482 | Teaching Art Processes | Art traditions of the 20th century as a basis for studio and art history instruction. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Fine Arts Art student |
| ARE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARE | 486 | Art Education: Strategies and Applications | Implementation and evaluation of art instruction for K-12 population. Includes teaching of Saturday classes in the Children's Art Workshop. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 482 with C or better |
| ARE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 496 | Methods and Assessment of Learning in Art | Individual or group research on the assessment of art learning incorporating theory and practice. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 250 with B- or better |
| ARE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisites: Minimum 90 hours |
| ARE | 510 | Visual Culture Research | Research on instruction of everyday aesthetics and related issues that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 520 | Issues in Teaching Inquiry in Art | Issues in teaching and learning focused both on inquiry about artworks and on inquiry through art making. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 525 | Research on Art Instruction | Research methods and assessment of learning in art. Pilot studies on the effects of instruction on learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 530 | Issues in Teaching Studio Art | Critical examination of issues concerning teaching multicultural art to different populations of students. Historical and philosophical foundations reviewed. Recommended to be taken before ARE 535. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 535 | Research on Teaching Studio Art | Review of empirical and historical research methods, learning theory, and assessment of learning in studio art, including developmental studies and their limitations. Pilot studies on the effects of instruction upon learning. Recommended to be taken after ARE 530. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 540 | Teaching Art in Cultural Contexts | Relationship of multicultural perspectives to teaching/learning art criticism, aesthetics, studio art, and art history. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARE | 546 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores and analyzes international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |
| ARE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 610 | Issues and Trends in Art Education | Doctoral-level investigation of historical and contemporary issues related to teaching and research in art education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 611 | Curriculum Development in Art Education | Doctoral-level inquiry into the philosophical, psychological, and sociological foundations of curriculum development. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |

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| ARE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 451 | Architecture Field Studies | Organized field study of architecture in specified national and international locations. Credit/no credit. May be repeated for credit with director approval. | N | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | |
| ARP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: ADE 322 with a C or better; Co-requisite: ADE 421; ATE 451 |
| ARP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| ARP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better |
| ARP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Architecture student |
| ARS | 100 | Introduction to Art | Provides an introduction to the understanding and enjoyment of art through the study of painting, sculpture, design, photography, and the decorative arts. Students gain an awareness of meaning, functions, and significance of art, while learning an art-related vocabulary and a set of analytical tools for discussing and understanding art from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art majors; Credit is allowed for only ARS 100, 101, 102, or 300 |
| ARS | 101 | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 102 | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |

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| ARS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 201 | Art of Asia | History of the art of the Asian cultures, with emphasis on China, Japan, and India. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 202 | Art of Africa, Oceania, and the Americas | History of art of Africa, Oceania, and the New World. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 250 | History of Photography | History of photography from the 19th century to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 300 | Introduction to Art | Parallels ARS 100 course content but requires a higher level of accomplishment and comprehension. Introduces visual culture, the purpose of art, and the relationship between art and visual culture. Students learn how visual culture pervades our everyday lives and how understanding visual literacy can help us participate more fully in the world around us. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art major: Minimum 55 hours; Minimum 2.00 GPA. Credit is allowed for only ARS 100, 101, 102 or 300; Graphic Design majors: Minimum 2.00 GPA; Minimum 55 hours; Graphic Design majors with credit for ARS 100 may not enroll in ARS 300 |
| ARS | 302 | Art/ Africa,Oceania & Americas | Issues in the art of Africa, Oceania, and the Americas related to ritual, gender, transformation of tradition, and encounters with Europeans. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | Pre-requisite: ENG 102, 105, or 108 |
| ARS | 310 | The Renaissance in Tuscany | Course taught in Florence, Italy. History of arts in Tuscany with focus on city of Florence from 14th through 16th centuries. Completion of ARS 101 and 102 suggested. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARS | 330 | The Portrait | Examines the history and production of portraits in contexts of social hierarchies, historical events, gender, politics, class, morality and aesthetics with a focus on the 15th to the 21st centuries in painting, sculpture and photography. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Any 200-level or higher course in APH, ARS, ENG, FMS, HST, MHL with B or better; Credit is allowed for only ARS 330 or 394 (Genre: Portraits) |
| ARS | 340 | Art in America | American art from colonial times through the Second World War. Not available to students who have completed ARS 542. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS 101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101. Credit is allowed for only ARS 340 or 542 |
| ARS | 345 | Art and Television | Critical introduction to the interrelation of technology and visual art using the tools of art history and media/cultural studies. Students read theorists of the relation between visual art and the mass media, and use them to analyze early presentations of visual art and art history on television of the 1960s and 1970s. Examines the contemporaneous and parallel development of video art--an artistic medium appropriated from television technology--through the study of key video artworks. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: minimum 2.00 GPA; minimum 45 earned hours; Credit is allowed for only ARS 345 or ARS 394 (Art & Television) |
| ARS | 362 | Pre-Columbian Art I | Architecture, sculpture, ceramics, painting, and other arts of Mesoamerica before European contact. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 400 | History of Printmaking | History of the print as an art form and its relation to other modes and forms of artistic expression. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 402 | Art of Ancient Egypt | Aesthetic, philosophical, and cultural basis of Egyptian art from pre-Dynastic period through New Kingdom. Emphasis on sculpture and architectural monuments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101 or ARS 102 with C or better; Credit is allowed for only ARS 402 or 502 |
| ARS | 404 | Greek Art | History of art, architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101 with C or better; Minimum Junior standing; Credit is allowed for only ARS 404 or 504 |
| ARS | 406 | Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS 101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 |
| ARS | 410 | Early Christian and Byzantine Art | Art and architecture of the early church and the Byzantine Empire from the 4th to the 15th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 412 | Early Medieval Art | Painting, sculpture, architecture, and the minor arts from Migration, Carolingian, and Ottonian periods considered within religious, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B or better |
| ARS | 414 | Romanesque Art | Sculpture, painting, architecture, and minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B or better. Credit is allowed for only ARS 414 or ARS 514 |
| ARS | 416 | Gothic Art | Painting, sculpture, and architecture in western Europe during the Gothic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 417 | Late Gothic Art in Central Europe | Sculpture, painting, and architecture of the late-Gothic style, ca. 1350-1525, considered within religious, social, economic, and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B or better. Credit is allowed for only ARS 417 or ARS 517 |
| ARS | 418 | German Renaissance and Reformation Art | Graphics, painting, sculpture, and architecture, ca. 1450-1550. Reformation themes and Renaissance style considered within religious, political, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B or better. Credit is allowed for only ARS 418 or ARS 598 (German Renaissance and Reformation Art) |
| ARS | 422 | Italian High Renaissance Art and Mannerism | History of Italian art during the 16th century, including the achievements and influence of Leonardo da Vinci, Raphael, and Michelangelo. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 422 or 522 |
| ARS | 424 | Italian Baroque Art | Italian painting, sculpture, and architecture of the 17th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 426 | Art of the 17th Century in Northern Europe | Baroque painting, sculpture, and architecture in Flanders, the Netherlands, France, and England. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 428 | Art of the 18th Century | History of painting, sculpture, architecture, graphic arts, and the decorative arts from 1700 to the French Revolution (1789). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s) with B or better: at least one course in APH, ARS, ENG, FMS, HST or MHL; Credit is allowed for only ARS 428 or 528 |
| ARS | 430 | Art of Spain and Its Colonies | Architecture, painting, and sculpture from 1500 to 1800. Colonial focus on central Mexico and the American Southwest. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 430 or 530 |
| ARS | 432 | 19th-Century French Art and Culture | History of painting, graphic arts, sculpture, and architecture, 1800 to 1900 in France in its political, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: At least one course in APH, ARS, ENG, FMS, HST or MHL with B or better; Credit is allowed for only ARS 432 or 532 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARS | 434 | Art and Visual Culture of 19th Century | History of European art (all media) from French Revolution to Paris World Fair of 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: At least one course in APH, ARS, ENG, FMS, HST or MHL with B or better; Credit is allowed for only ARS 434 or 534 |
| ARS | 435 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better; Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 436 | The Artist, War, and Revolution (Versailles to Vietnam) | Critical study of artistic responses to war and revolution in Europe and United States from French Revolution to Vietnam conflict. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 437 | British Culture and Empire | Examines British imperial culture in art and literature, 1870-1914, and postcolonial theory. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: One course in ARS, ENG, or HST at 200 level or higher with B or better |
| ARS | 438 | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | 439 | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | 440 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 55 hours; At least one 200-level course in literature, art history, history, OR film and media studies with a grade of B- or better; Credit allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| ARS | 441 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Also considers historical precedents, including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 442 | Critical Issues in American Painting | Explores issues of national identity and western expansion, Manifest Destiny, through images of race and violence in western American painting from 1800 to the early 20th century. Includes "claiming and settling the wilderness," cultures in conflict, the cowboy, and visions of an enchanted land. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 442 or 542 |
| ARS | 443 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| ARS | 444 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| ARS | 451 | 20th Century Photography | Personalities, processes, images, and ideas in photography from 1914 to present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARS | 458 | Critical Theories in the Visual Arts | Examines current critical theories through their application to all visual arts. May include new historicism, Marxism, deconstruction, post-structuralism, semiotics, Lacanian psychoanalysis, feminism, postmodernism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 459 | Writing Art Criticism | Traditional and contemporary approaches to the criticism of art. Students write critical essays. Latter half of the semester stresses the criticism of contemporary art in various media. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: ARS 458 |
| ARS | 460 | Art Now | Critical overview of major issues and controversies of the last 10 years within the global, national, and local art scene. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 102 with B- or better or one course in ARS, ENG or HST at the 200 level or higher with B or better; Digital Culture major |
| ARS | 465 | Native Art of North America | Native American art forms of the United States and Canada from prehistoric times to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 465 or 565 |
| ARS | 466 | Native American Art of the Southwest | American Indian art in the southwestern states from its origins to the present day. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 468 | Art of the Arctic and Northwest Coast | Art associated with ceremony, shamanism, and daily life in the Arctic and on the Northwest Coast. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 469 | Mexican Art | Art of Mexico and related Central American cultures from the prehistoric to the contemporary schools. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 472 | Art of China | Study of major forms in Chinese art: ritual bronze, sculpture, ceramic, calligraphy, painting, and architecture. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA |
| ARS | 473 | Art of Japan | Japanese art from the Joman period to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisite: Minimum 55 hours; Credit is allowed for only ARS 574 or ARS 473 |
| ARS | 475 | Chinese Painting | From Ku K'ai-chin to Chi Pai-shih. Major artists, styles, and movements in Chinese painting. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 475 or 575 |
| ARS | 480 | Research Methods | Methodology and resource material for art historical research. Techniques of scholarly and critical writing and evaluation of bibliographic sources. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: Museum Studies or Art History student; Junior standing; ARS 101 and ARS 102 with B- or better |
| ARS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARS | 485 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 485 or 585 |
| ARS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| ARS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisite: Minimum 90 hours |
| ARS | 501 | Methodologies and Art History | History of the discipline and an exploration of various methodologies, critical theory, and bibliographies used by art historians. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 502 | Critical Studies in Egyptian Art | Egyptian art from pre-Dynastic to New Kingdom periods. Focus on aesthetic, philosophical, and cultural contexts. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 402 or 502 |
| ARS | 504 | Critical Approaches to Greek Art | Art and architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 404 or 504 |
| ARS | 506 | Critical Studies in Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. Research paper and/or supplemental readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 514 | Critical Approaches to Romanesque Art | Sculpture, painting, architecture, and the minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. Requires research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 414 or 514 |
| ARS | 516 | Critical Approaches to Gothic Art | Architecture, sculpture, painting, and the minor arts in western Europe, ca. 1150-1350, considered within religious, social, and economic contexts. Requires research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 417 or 517 |
| ARS | 517 | Critical Approaches to Late Gothic Art | Art of the late-Gothic style, ca. 1350-1525, considered within religious, social, economic, and political contexts. Requires research or reading project. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours; Credit is allowed for only ARS 417 or 517 |
| ARS | 522 | Sixteenth-Century Italian Art | Critical study of painting, sculpture, and architecture in 16th-century Italy in its religious and historical context. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: degree- or nondegree-seeking graduate. Credit is allowed for only ARS 422 or ARS 522 |
| ARS | 528 | Eighteenth-Century Art in Europe | Critical study of European art from the late Baroque to the early years of Neoclassicism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Degree- or Nondegree-seeking graduate; Credit is allowed for only ARS 428 or 528 |
| ARS | 530 | Art of Spain and New Spain | Critical study of architecture, painting, and sculpture from 1500 to 1800. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours; Credit is allowed for only ARS 430 or 530 |
| ARS | 532 | Art, Politics, and Patronage, 1770-1850 | Critical analyses of political events in Europe. Examines issues of patronage, art as propaganda, impact of war and revolution on visual arts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 432 or 532 |
| ARS | 533 | The Pre-Raphaelites | Explores Pre-Raphaelite culture, both literature and art, and relevant social history, from the Pre-Raphaelite Brotherhood through Aestheticism and early twentieth century, focusing on interactions between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 534 | Art and Visual Culture of the 19th Century | Critical study of visual arts using primary source material from mid-19th century to WWI within philosophical, socioeconomic, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 434 or 534 |
| ARS | 535 | British Culture and Empire | Examines ways in which British art and literature of the "high imperial" period (1870-1914) expressed and shaped the national discourse on imperialism in England. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: School of Art Graduate student or Senior with more than 107 hours and ARS 101 and 102 with B or better |
| ARS | 538 | Art of the 20th Century I | Charts how the avant-garde in the early 20th century developed different strands of modern art as it sometimes grew closer to, and at other times veered away from, radical politics. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 438, 538 or 598 (Art of 20th Century I) |
| ARS | 539 | Art of the 20th Century II | General introduction to major trends and issues of Euro-American art created between 1955 to around the turn of the 21st century. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for either ARS 439 or ARS 539 or ARS 598, Art of 20th C |
| ARS | 540 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| ARS | 541 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Considers historical precedents including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 542 | Critical Issues in American Painting | Explores themes and social issues in American art with a critical study of American painting from the 18th century to 1850. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 340, 442 or 542 |
| ARS | 544 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 444, ARS 544, ARS 598 (Films of India) or FMS 426 |
| ARS | 562 | Art of Ancient Mesoamerica | Critical study of art and architecture of Mexico and Maya areas before Spanish contact. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 565 | Native Art of North America | Critical examination of Native American art within culture, prehistory to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 465 or 565 |
| ARS | 574 | Studies in Japanese Art | Critical examination of the nature and history of Japanese art, its rich heritage and its indebtedness to foreign sources. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 473 or 574 |

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| ARS | 575 | Approaches to Chinese Painting | Critical history of Chinese painting from Eastern Chou to 1911. Emphasis on masters, regional developments, and conceptual underpinnings. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 108 hours; Senior or Postbaccalaureate Undergraduate or Graduate; Credit is allowed for only ARS 475 or 575 |
| ARS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 585 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking), Credit is allowed for only ARS 485 or 585 |
| ARS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| ARS | | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ARS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARS | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ART | 110 | Drawing as Seeing and Thinking | Immerses students from a broad range of non-art disciplines in the practice of drawing. Considers and reflects on drawing in its most expanded form: as a primary tool of communication and creative problem solving, as movement, as sensory experience and as its own unique method of cognition. Divides class meetings among lectures, exercises, field excursions and opportunities for critical dialogue. Students leave with an appreciation of the unique power of mark-making and an improved understanding of its application in their lives. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ART 110 or 194 (Drawing as Seeing and Thinking) |
| ART | 111 | Drawing I | Fundamental, technical, and perceptual skills using common drawing media and their application to pictorial organization. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 112 | 2-D Design | Fundamentals of pictorial design. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art, Art-Exploratory, Minor in Studio Art, or BIS concentration in Studio Art student |
| ART | 113 | Color | Principles of color theory as related to the visual arts. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 115 | 3-D Design | Fundamentals of 3-D form. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 116 | Introduction to Digital Media | Concentrates on the fundamentals of digital media, including imagery, sound, video, animation, and the Web. Assignments are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques and software as they become familiar with contemporary artistic processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 116 or 194 (Introduction to Digital Media) |
| ART | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ART | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 201 | Photography I | Development of skills and techniques of black and white photography. Emphasis on camera work and darkroom procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 202 |
| ART | 202 | Photography I Lab | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 0 | | Corequisite(s): ART 201 |
| ART | 204 | Photography II: Black and White | Photography as an art medium with additional exploration into personal photographic aesthetics. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 205 | Photography II: Color | Uses both film and digital capture to explore color photography in depth. Emphasizes computer editing and printing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 211 | Drawing II | Continued development of technical and perceptual skills. Emphasizes materials and pictorial content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 214 | Life Drawing I | Development of skill and expressiveness in drawing the basic form, construction, and gesture from the human figure. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 216 | Intermedia Practices | Investigates the multidisciplinary practice of Intermedia within a fine art context and functions as a bridge between foundation courses and the Intermedia degree area specialty. Relying on principles and techniques from foundation level classes, students learn to choose appropriate media for a particular idea and construct work that is concept-driven and incorporates cross-disciplinary approaches. Students develop individual and diverse approaches to fusing traditional art disciplines with experimental, performative, spatial, and digital technologies. Students explore the full range of options available to contemporary artists and discuss the ever-shifting definition of intermedia and new media. Students may work in media including drawing, photography, mixed media, video, sculpture, networked, multimedia, electronic arts, digital sound manipulation, image processing, performance, and installation. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/corequisite(s): ART 113, 116 or 194 (Intro to Intermedia) with C or better; 2 from ART 111, 112 or 115 with C or better OR Art Digital Culture major; ART 111, 112 or 113 with C or better; credit for only ART 216 or 294 (Intermedia Practices) |

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| ART | 218 | 3D Tools | Introduces 3D data capture, 3D modeling and rendering, and 3D prototyping and fabrication through creative/research activities using CNC and rapid prototyping tools. Projects are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques, software tools, and hardware in the course of making their creative/research projects, becoming familiar with contemporary artistic and engineering processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 218 or 294 (3D Tools) |
| ART | 223 | Painting I | Fundamental concepts and materials of traditional and experimental painting media. Emphasizes preparation of painting supports, composition, and color. Lab. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 113 with C or better |
| ART | 227 | Watercolor I | Fundamental concepts, materials, and techniques of watercolor. Emphasizes problem solving, basic skills, composition, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 113 with C or better |
| ART | 231 | Sculpture I | Explores sculptural forms through concepts related to basic materials. Focus on studio production, safety, aesthetic criticism, and history of sculpture. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 115 with C or better |
| ART | 253 | Introduction to Printmaking | Introduces basic monotype, intaglio, relief, and related techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 113 with C or better |
| ART | 261 | Ceramic Survey | Handforming methods, throwing on the wheel, decorative processes, and glaze application. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 112 and ART 115 with C or better |
| ART | 272 | Introduction to Metals and Jewelry | Emphasizes metal fabrication. Basic techniques of cutting, piercing, forging, soldering, and forming of non-ferrous metals. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; maximum junior standing; ART 112 and ART 115 with C or better |
| ART | 274 | Wood I | Fundamental woodworking techniques to produce creative functional 3-D objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 276 | Fibers I | Explores traditional and contemporary materials and basic techniques related to fibers. Embroidery, feltmaking, dyeing, block printing, plaiting, 3-D structures. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 112, 115; undergraduate Art major; maximum junior standing OR The Arts (Fashion Design) major |
| ART | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 301 | Alternative Processes | Recognition Alternative Processes of the inherent characteristics of nonsilver processes and their use in communicating ideas. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major with completed portfolio; ART 204 with C or better |
| ART | 304 | Junior Photographic Projects | Interpretation and manipulation of light as a tool in the performance of expressive photography. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; completed portfolio milestone (if required); ART 204 (and ART 101, ART 201) with C or better |
| ART | 307 | View Camera | View camera and darkroom techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART204 (and ART101, ART201) with C or better |
| ART | 308 | Digital Photographic Images I | Scanning, manipulation, refinement, and compositing of photographic images on the computer. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; completed portfolio milestone (if required); ART 204 (and ART 101, ART 201) with C or better |
| ART | 311 | Drawing III | Emphasizes composition, exploration of drawing media, 6 hours a week. Requires acceptance into the appropriate professional program or instructor approval. Contact your academic advisor in the School of Art for more information. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major: ART 211 with C or better; acceptance into professional program OR Studio Art minor: ART 110 and 112 with C or better |
| ART | 314 | Life Drawing II | Drawing from the model with greater reference to structural, graphic, and compositional concerns. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or completed portfolio milestone; ART 214 with C or better OR Studio Art minor: ART 110 with C or better; ART 112 with C or better |
| ART | 323 | Painting II | Development of competency in skills and expression. Assigned problems involve light, space, color, form, and content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio; ART 223 with C or better OR Studio Art minor: ART 110 with C or better; ART 113 with C or better |
| ART | 325 | Figure Painting | The human figure clothed and nude as the subject for painting in selected media. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 214 and ART 323 with C or better |
| ART | 327 | Watercolor II | Explorations of personal expression in watercolor. Continued development of watercolor skills using traditional and experimental materials and techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: Art major; ART 227 or Studio Art minor: ART 110 or BIS Studio Art emphasis: ART 110 |
| ART | 331 | Sculpture II | Continuation of ART 231 with an emphasis on metal fabrication as an expressive sculptural process. Techniques in welding, cutting and bending of metals and their aesthetics. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major with portfolio completed; ART 231 with C or better OR Studio Art minor; ART 110 and 115 with C or better |
| ART | 332 | Sculpture III | Explores diverse media with a focus on mold-making processes. Development of the sculpture portfolio. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 331 with C or better |
| ART | 333 | Foundry Casting Methods | Fine art and techniques of metal casting: mold making, foundry safety, finishing techniques, application of patinas, and history of casting. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 332 with C or better OR Studio Art minor; ART 110 and 115 with C or better |
| ART | 345 | Visualization and Prototyping | Studio/seminar introduces concepts of computer visualization, modeling, and rapid prototyping in an interdisciplinary manner. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Digital Art OR Intermedia student |
| ART | 346 | 3-D Computer Imaging and Animation | 3-D modeling and animation. Emphasizes concepts and fine arts applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | CS | Prerequisite(s): ART major or Digital Culture (Art) major: ART 111, ART 112 or ART 113 with a 'C' or better OR Minor in Studio Art (HISTARTMIN): ART 110 with a 'C' or better, and ART 112 or ART 113 or ART 115 or ART 116 with a 'C' or better. |
| ART | 348 | Animation Motion Studies | Principles and applications of 3-D animation for fine arts. Emphasizes animation techniques for expressive effects. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 with C or better |

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| ART | 351 | Intaglio I | Introduces concepts and techniques of intaglio processes, including non-acid and acid techniques such as drypoint, line etch, aquatint, photo etching; introduces multiple plate printing ala poupee wiping, chine colle, and basic color. Idea-generating exercises include visual signifiers of identity, democratic multiple, time and space, the disembodied gaze, and reconsidering beauty. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 352 | Lithography I | Monochromatic and color planographic printmaking utilizing stone and aluminum plate processes. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better |
| ART | 354 | Screen Printing I | Introduces paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; two from ART 111, 112, 113 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 355 | Printmaking as Photography | Introduces photographic principles and skills for photomechanical printmaking processes, including photosilkscreen, photolitho, and photoetching. 6 hours a week. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better |
| ART | 360 | Ceramic Throwing | Design analysis and production of functional pottery. Emphasis on throwing techniques, surface enrichment, and glaze application. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA Art major; ART 261 OR Studio Art minor (or BIS Studio Art emphasis); ART 110 and 115 |
| ART | 363 | Ceramic Clay-Glaze | | N | LEC | N | CNV | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 364 | Ceramic Handbuilding I | Search for form using handbuilding techniques. Kiln firing and related problems. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |
| ART | 365 | Ceramic Handbuilding II | Continuation of ART 364 with an additional focus on large-scale works, surface treatments, and glaze decoration with related kiln firing applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and 364 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 364 with C or better |
| ART | 372 | Casting and Jewelry Techniques | Covers lost wax casting for jewelry scale work and alternative casting methods and mold making as well as other techniques such as chain making and marriage of metals. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 373 | Form Emphasis in Metals | Covers forming non-ferrous metals using techniques such as anticlastic and sinclastic forming, raising, fold forming. Projects focus on hollow forms using these various techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 374 | Wood II | Individual and directed problems in wood related to the production of unique functional art objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 with C or better |
| ART | 376 | Woven Structures I | Explores weaver- and loom-controlled structures with an emphasis on formal issues, historic precedence, and contemporary investigations. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |
| ART | 377 | Surface Design | Application of dyes and pigments on cloth exploring techniques, formal issues, and content. Cyanotype, monoprinting, painting on silk, resists, stenciling. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |
| ART | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 403 | Senior Photographic Projects | Technical and philosophical refinement of personal aesthetic with various photographic media. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 404 | Portraiture Photography | Photographing people. Critical discussions and slide lectures on issues in portraiture. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 409 | Photographic Exhibition | Care of photographic prints, print presentation, and exhibition. Practical experience in gallery operations. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 410 | Landscape Photography | Photographing landscapes. Critical discussion and presentations on issues in landscape photography. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 411 | Drawing IV | Visual and intellectual concepts through problem solving and independent study. Emphasis on the individual creative statement. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 211 and ART 311 with C or better |
| ART | 414 | Life Drawing III | Various media and techniques on an advanced level. The human figure as an expressive vehicle in various contexts. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 314; credit is allowed for only ART 414 or ART 514 |
| ART | 415 | Art Anatomy | Study of human anatomical structures as applied to the practice of figure-oriented art. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 4 | | Prerequisite(s): Art student; ART 214 with C or better |
| ART | 423 | Painting III | Further exploration of techniques and concepts of painting. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 223 with C or better; ART 323 with C or better; Art major; credit is allowed for only ART 423 or 523 |
| ART | 425 | Advanced Figure Painting | The human figure clothed and nude as the subject for painting in selected media. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 223, 323 and 314 with C or better; credit is allowed for only ART 425 or 525 |
| ART | 427 | Art on Paper | Advanced techniques, concepts, and processes with water media and mixed painting and drawing media on paper. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute student; min 55 hours; min 2.00 GPA or BIS Studio Art emphasis or Studio Art minor; ART 110 and ART 112 (or ART 113, 115, 116) with C or better; min 2.00 GPA; min 45 hours. Credit is allowed for only ART 427 or 527 |
| ART | 428 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: BA or BFA Art major; ART 231 with C or better. Credit is allowed for only ART 428, 494 (New Systems-Sculpture) or 528 |
| ART | 431 | Special Problems in Sculpture | Development of a personal approach to sculpture. Emphasis on form, individual problems, and related color technology. Professional practices and presentation. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231, ART 331 and 332 with C or better |
| ART | 432 | Neon Sculpture | Techniques for creating neon in an art context. Glass tube bending and fabrication. Construction of artworks utilizing light-generating gasses. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |

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| ART | 433 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Requires participation in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Provides a history of the use of cast metal in the visual arts and an understanding of how casting processes can be applied to contemporary sculptural concepts. Requires participation in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Corequisite(s): ART 332 with C or better |
| ART | 435 | Foundry Research Methods | Research in foundry techniques. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): minimum 45 hours |
| ART | 436 | Architectural Sculpture | Sculptural concepts as related to architecture and other man-made environments. Scale drawing, models, and relief sculpture. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 231 with C or better; ART 331 with C or better; ART 332 with C or better |
| ART | 437 | Film Animation | Production of short 16mm films that feature articulated sculptural objects, models, dolls, puppets, and graphics through the use of single-frame filming techniques. 6 hours a week. May be repeated for credit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better |
| ART | 438 | Moving and Interactive Systems in Sculpture | Explores new tools in digital fabrication, multipart constructions and digitally manipulated surfaces. Earmarks exploration regarding fabrication with computer numerically controlled lasers, plasma cutters and routers. Regular technique demonstrations, slide lectures and hands-on studio work. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better; Credit is allowed for only ART 438 or 538 |
| ART | 439 | Intermedia Studio | Exploring visual effects by combining traditional and nontraditional methods, techniques, and concepts. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Digital Culture (Art) student; ART 111, ART 112 or ART 113 with C or better or Studio Art minor (or BIS Studio Art emphasis), ART 110 and 116; credit is allowed for only ART 439 or 539 |
| ART | 440 | New Media Concepts | Continued experiments with new media and interdisciplinary concerns in art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 441 |
| ART | 441 | Video Art | Utilizing video and audio equipment essential to the production of broadcast quality video art. 2 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): Art portfolio completed; corequisite ART 440 |
| ART | 442 | Art and Community | Explores through studio practice, research and presentations intermedia social art practice, public practice, arlife practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit is allowed for only ART 442 or 494 (Art and Community) |
| ART | 443 | Intermedia Performance | Experimental, conceptual, and interdisciplinary studio art with emphasis on performance and new media practices. May be repeated once for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit allowed for either ART 443, 543 or 598 (Intermedia Performance) |
| ART | 444 | Web Art | Explores Web technology as a medium to create interactive art works for the Internet. Concept-driven curriculum wherein the idea for each work and its development is emphasized. The technical aspect of the work supports the concept. Students create storyboards and flowcharts to facilitate the application of the concept to the technology. The technical emphasis is on interactivity and time-based Net art. Students use existing software, learning the interface and programming associated with the software. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Intermedia majors eligible for upper-division credit; credit is allowed for only ART 444 or 494 (Web Art) |
| ART | 445 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques, including image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): 50 minimum hours; credit is allowed for only ART 445 or 494 (Digital Process for Print) |
| ART | 449 | Computer Animation and Video | Integrates 3-D fine arts animation with video and compositing. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 and ART 348 with C or better |
| ART | 450 | Computer Animation and Audio | Integrates audio with 3-D animation for fine arts applications. Includes compositing and effects. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346, ART 348 and ART 449 with C or better |
| ART | 451 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spit bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351 with C or better; credit is allowed for only ART 451 or 551 |
| ART | 452 | Advanced Lithography | Continuation of ART 352. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or completion of portfolio milestone; ART 253 and ART 352 with C or better |
| ART | 453 | Experimental Printmaking: Expanding the Matrix | Alternative methods of working with print techniques, including installations, actions or performances, and other nontraditional formats. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351, 352, or 354 with a C or better; credit is allowed for only ART 453, 553 or 598 (Experimental Printmaking) |
| ART | 454 | Advanced Screen Printing | Continuation of paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 354 with C or better |
| ART | 455 | Advanced Photo Processes for Printmaking | Continued study of photomechanical techniques and applications to printmaking or photographic processes. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or completion of portfolio milestone; ART 253 and ART 355 with C or better |
| ART | 456 | Fine Printing and Bookmaking I | Letterpress printing and typography as fine art. Study of history, alphabets, mechanics of hand typesetting, presswork, and various forms of printed matter. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better, or non-art major with 56 credit hours; minimum 2.50 GPA. Credit is allowed for only ART 456 or ART 556 or ART 598 Fine Printing and Bookmaking I |
| ART | 457 | Fine Printing and Bookmaking II | Continuation of ART 456. Bookbinding, book design and printing, advanced typography, theory, and presswork. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art student; ART 253 and ART 456 with C or better; Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 458 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments, and 3-D approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better, or non-majors with 56 minimum credit hours; minimum 2.50 GPA. Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 458 or ART 558 |

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| ART | 459 | Monoprinting | Nonmultiple printed image using a variety of technical approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BA or BFA Art major, minimum 45 hours; or OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor; ART 110, ART 112 (or ART 113, 115 or 116) with C or better |
| ART | 460 | Ceramic Clay | Research into various clay body formulations, local natural materials, slip glazes, and engobes. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better; Pre- or corequisite(s): ART 360 and ART 364 with C or better if completed |
| ART | 461 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; credit allowed for only ART 461 or 494 (Polymer Plate Prints) |
| ART | 463 | Ceramic Glaze | Glaze calculation and formulation using various glaze colors and surfaces. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 261 with C or better |
| ART | 466 | Special Problems in Ceramics | Emphasis on personal expression within structure of seminars, critiques, and studio work. Professional methods of presentation/documentation of work. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and ART 364 with C or better |
| ART | 472 | Advanced Jewelry and Surface Techniques | Covers jewelry forms and techniques including surface embellishment such as granulation, keum-boo and filigree to be used as tools for aesthetic expression and expand student awareness of historical and contemporary jewelry/metalwork. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 and ART 372 with C or better |
| ART | 473 | Advanced Metals and Mechanisms | Covers new techniques and develops existing skills in non-ferrous metal forming and mechanism fabrication while further refining fitting and finishing techniques, incorporating concept with craft and emphasizing professional practices/portfolio development. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better; ART373 with C or better; credit is allowed for only ART 473 or 598 (Adv. Metals & Mechanisms) |
| ART | 474 | Advanced Wood | Extended experience and advanced techniques in the use of wood to create functional works of art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 and ART 374 with C or better |
| ART | 476 | Woven Structures II | Emphasizes personal expressions and continues technical exploration in woven structures. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 376 with C or better |
| ART | 477 | Printed Textiles | Techniques for screen printing on fabric exploring pattern as a compositional element. Various stencil methods including photographic processes. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 377 with C or better |
| ART | 478 | Advanced Surface Design | Emphasis on personal expression with advanced problems in stitch resist, arashi shibori, transfers, indigo, vat and disperse dyes, and pigments. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio completed; ART 276, ART 377 and ART 477 with C or better |
| ART | 479 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art major or Studio Art minor; ART 276 with C or better; Credit is allowed for only ART 479 or ART 579 or ART 598 (3-D Fibers) |
| ART | 482 | Senior Exhibitions/Portfolio | Capstone course required of all BFA studio art majors. Students participate in a group exhibition and focus on professional practices, including exhibition display and advertisement, career planning, and development of a professional packet with artist statement, CV, and digital portfolio. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): BFA student; minimum 100 hours; credit is allowed for only ART 482 or 494 (Senior Exhibition/Portfolio) |
| ART | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): Art student |
| ART | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | STO | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ART | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | STO | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ART | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ART | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | Prerequisite(s): Art student |
| ART | 501 | Cross-Practice Critique | Engages graduate students in deep, sustained critical discussion about artwork made by students in the class. Students investigate together the process(es) of critiquing artwork and consider and discuss the underlying assumptions and values they bring to this method of communication and pedagogy. Helps students develop and improve their critical voice at whatever level they are at, including the ability to receive and accept critical feedback of their work. Encourages students to hone their sense of personal agency in the context of "the crit." | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate |

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| ART | 508 | Experimental Film | Facilitates the exploration of 16 mm motion picture film as material and methodological fodder for artists. Students use original, found, and hand-altered footage to create projects of their own design. Covers basic techniques including camera operation, film exposure, and analog editing practices. Explorations also include in-class experiments, readings, discussions and screenings. For upper-division undergraduate and graduate art students attracted to the material and theoretical issues embodied in film and who are curious about how film might inform their own ongoing advanced artistic pursuits. Graduate level focuses on the development of a personal approach. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 408, 494 (experimental Film), or ART 508, or ART 598 (Experimental Film) |
| ART | 514 | Graduate Life Drawing | Advanced study of the human figure as an expressive vehicle in various contexts. Graduate level focused on the development of personal approach. Timed poses of short and long duration with emphasis on using the figure to enhance the students individual research. Art historical component will be included to enable the student to fit themselves into the context of the use of the figure as it relates to the study of the history of art. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 414 or 514 |
| ART | 523 | Graduate Painting | Concentrates on formal and conceptual skills and explores a variety of topics, including historical and contemporary painting issues, visual literacy, critical thinking, and professional practices. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR Senior or Postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 423 or 523 |
| ART | 525 | Graduate Figure Painting | Advanced study of the human figure clothed and nude as the subject for painting in selected media. Graduate level study focused on the development of personal expression. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 425 or 525 |
| ART | 527 | Graduate Art on Paper | Exploration focused on conceptual and technical approaches combining mixed media painting and drawing on paper and related surfaces. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute for Design and the Arts graduate student; credit is allowed for only ART 427 or 527 |
| ART | 528 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 428, ART 528, or ART 598 (New Systems Sculpture) |
| ART | 530 | Digital Compositing | Fine arts digital compositing of computer animation, video, and video editing of composites with audio. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 532 | Neon Sculpture | Emphasizes techniques for creating neon in an art context, including glass bending and fabrication. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 532 or ART 598 (Neon Sculpture) |
| ART | 533 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Students are expected and required to participate in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Students deepen their knowledge of the history of the use of cast metal in the visual arts and understanding of how casting processes can be applied to contemporary sculptural concepts, participating in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 533 or 598 (Foundry Casting Methods) |
| ART | 538 | Experimental Systems in Sculpture | Students create sculptures that incorporate movement, sound and interactivity while also developing their personal expression as artists. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 438, 538 or 598 (Exp. Systems in Sculpture) |
| ART | 539 | Intermedia Studio | Investigates how intermedia practice can expand the realm of conversations within contemporary art, life and society. Encourages investigation of social art practice, ar/life practices, conceptual art, digital art, emergent media, installation, new genre public art, performance, and visual art with emphasis on research, production and theory. Students expand their ability to assess interdisciplinary strategies. Through reinforcing artistic rigor, students deepen their ability to employ intermedia methods as artistic communication, to express a personalized point of view. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 439, 539 or 598 (Intermedia Studio) |
| ART | 540 | Digital Motion Studies | Fine arts digital motion studies using computer animation and video. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 542 | Art and Community | Through studio practice, research and presentations, explores intermedia social art practice, public practice, ar/life practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. Graduate students, in conjunction with the instructor, create their own workplan for the course. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 542 or 598 (Art and Community) |

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| ART | 543 | Intermedia Performance | This concept-driven course explores intermedia as a contemporary art practice from a performance/live art perspective. Students create performance and time-based work connected to their individual artistic interests while making connections among art, life, and society. Students working in a diverse range of disciplines and artistic genres discover new processes of working and negotiate unexpected connections inherent in interdisciplinary production and cross-disciplinary collaboration. Student projects depend on particular specializations and passions brought to the class and may produce a range of multimedia performance work including performing for the camera, interactive networks, analogue/digital sound, video, sculpture, and installation. Semester I addresses the body as material exploring the body, subjectivity, and cultural histories. Semester II focuses on the body in public space exploring intervention and the everyday. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 543 or 598 (Intermedia Performance) |
| ART | 544 | Graduate-Level Web Art | Students research Web art and apply this to their own art practice. Concepts and content of the Web art class projects parallel individual aesthetic preferences. Explores Web technology as a new medium to create interactive Internet works. Technical emphasis on interactivity and time-based net art. Utilizes existing software, learning the interface and programming associated with it. Includes articles and essays by professional Web artists and theorists in required reading. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 494 (Web Art), ART 544, or ART 598 (Web Art) |
| ART | 545 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Course is comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques: image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 545 or 598 (Digital Processes for Printmaking) |
| ART | 551 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spit bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours; credit is allowed for only ART 451 or 551 |
| ART | 553 | Experimental Printmaking: Beyond the Matrix | Focuses on the development of concepts in printmaking beyond the traditional two-dimensional image on paper that is contained in a portfolio or frame. Explores alternative techniques and materials, methods of extending the print beyond 2 dimensions, and expanding the concept of what is a print. Students are encouraged to understand printmaking within the wider context of contemporary art, especially those directly related to the student's main artistic emphasis (if not printmaking). | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 553, 453 |
| ART | 554 | Graduate Screenprinting | Focuses on the development of screenprinting techniques and the ability to utilize these techniques as an expressive visual method of exploring and developing individual research concepts. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 554 or 598 (Advanced Screen Printing) |
| ART | 556 | Fine Printing and Bookmaking I | Offers instruction in the techniques of fine printing—letterpress—and using typography and printing as a fine art medium, as well as evaluating text as image and content in the aesthetics of print. Also considers bookforms, binding techniques and artists' books for the expansion of that aesthetic. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 456, ART 556, or ART 598 (Fine Printing and Bookmaking I) |
| ART | 557 | Fine Printing and Bookmaking II | Continuing study of letterpress in fine art—the book arts—with emphasis on the book. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 558 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments and 3-D approaches. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 458, ART 558 or ART 598 (Papermaking) |
| ART | 559 | Monoprinting | Investigates monoprint/monotype printmaking and its aesthetic possibilities. Students acquire basic and advanced skills in the medium through demonstrations, problem solving exercises, and experimentation. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 559 or 598 (Monoprinting) |
| ART | 561 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 561 or 598 (Polymer Plate Prints) |
| ART | 576 | Woven Structures | Expanding upon prior woven techniques, develops methods in warp manipulation through material explorations, dye techniques and structure applications. Dye methods include ikat, warp painting and over-dyeing. Complex structural investigations include loom controlled double weave, over-shot, computer-aided design, and the compu-dobby loom. In addition to learning technical skills, also provides theoretical and historical readings with in-class discussions that provide impetus for conceptual developments within the assignments. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only ART 476, 576, or ART 598 (Woven Structures) |
| ART | 577 | Printed Textiles | Provides advanced instruction in surface design techniques, focusing on screen printing on fabric. Explores a variety of stencil methods. Studio problems explore structured pattern and single edition prints. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 577 or 598 (Printed Textiles) |

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| ART | 578 | Advanced Surface Design | Explores advanced surface design methods and the expressive potential of fabric. Critical analysis of the integration of materials, process, and concept. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 578 or 598 (Advanced Surface Design) |
| ART | 579 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 479, 579 or 598 (3D Fibers) |
| ART | 582 | Art Research | Independent study research using classroom facilities and supplies. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 621 | Studio Problems | Advanced study. 3 hours a week each section. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 682 | MFA Exhibition Research | MFA exhibition practicum using classroom facilities and supplies. Can be used in place of ART 680. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ART | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): Art student |
| ASB | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease; ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB 100 or SSH 100 |
| ASB | 101 | Anthropology: Understanding Human Diversity | Provides an integrated understanding of biological, historical, and cultural evolutionary processes that account for human variation. Specifically examines how humans evolved and how they obtained the characteristics that make us a unique species. Considers cultural and biological models of cooperation, resource acquisition and distribution, sex and marriage, parenting, conflict and warfare, political structures, power and status, sex roles, ritual, religion, and language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |

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| ASB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| ASB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| ASB | 210 | Human Sexuality: Anthropological Perspectives | Examines the sexual nature and behavior of humans from both a biological and an anthropological point of view across various cultures around the globe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | |
| ASB | 220 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| ASB | 222 | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 223 | Aztecs, Incas and Mayas | Archaeological and historical study of the three best-known ancient cultures of Mesoamerica and South America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 230 | Beginning Culture Theory | Bridges ASB 102 and upper-division courses; introduces cultural theory and fosters independent thinking, critical analysis, communication, and adaptability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | 252 | Sports and Culture | Cross-cultural examination of symbolic and social dimensions of sports past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 272 | Environmental Justice | Surveys key environmental justice issues and movements. Uses interdisciplinary social science perspectives to review and analyze U.S. and international case studies. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| ASB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisites: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| ASB | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better. Credit is allowed for only ASB 301, HST 301 or SSH 301 |
| ASB | 302 | Ethnographic Field Study | Fieldwork study of cultural adaptation through ethnographic research methods and local culture. Taught in Latin America or other international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisite: ASB 102, 222, 223, or ASM 104 |
| ASB | 310 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |
| ASB | 311 | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | |
| ASB | 314 | Comparative Religion | In-depth study of origins, elements, forms, and symbolism of religion; an advanced comparative survey of religious beliefs and ceremonies; the place of religion in culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisites: ASB 102, ASB 222, or ASB 223 |

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| ASB | 316 | Money and Culture | Using the fundamentals of economic anthropology, investigates how culture shapes our relationship to money and decision making. Provides a foundation for thinking about how production, exchange and consumption can be explained by looking at human behavior, thought and culture, and encourages students to apply anthropological knowledge to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| ASB | 319 | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 321 | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | 322 | Peoples of Latin America | Indigenous, mestizo, and national cultures, rural and urban peoples in the region that today we call Latin America. Covers historic and contemporary events and cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisites: ASB 102 with C or better or minimum 45 hours |
| ASB | 324 | Peoples of the Pacific | Peoples and cultures of Oceania focusing particularly on societies of Melanesia, Micronesia, and Polynesia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 325 | Peoples of Southeast Asia | Cultural-ecological perspective on the peoples of mainland and insular Southeast Asia. Subsistence modes, social organization, and the impact of modernization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 326 | Human Impacts on Ancient Environments | World survey of successful and unsuccessful ancient societies and their impacts on the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | |
| ASB | 327 | Disaster! | Examines the causes of disasters, such as famines and pandemics, throughout human history. Explores cases in which social responses to disaster have helped people survive or led to their demise. Through hands-on activities, students gain experience with popular tools to understand human responses to disasters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Prerequisite(s): ASB 102 with C or better or minimum 45 hours |
| ASB | 328 | Rules, Games, and Society | Concepts and practical tools to study the relation between groups of people and their common resources and public goods. Methods for identifying the diversity of institutional arrangements and analyzing their effectiveness. Example topics include sports, digital commons, environmental management, and urban environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101; Minimum 45 hours |
| ASB | 330 | Thinking Through Archaeology | In-depth study and critique of theories and methods for reconstructing the lives of prehistoric peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 222 (or ASB 223 or 335 or 337) |
| ASB | 335 | Archaeology of the Southwest | Archaeological exploration of the the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H & C | Pre-requisites: ASB 102, ASB 222 or ASB 223 or minimum 45 credit hours |
| ASB | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| ASB | 337 | Pyramids and Hieroglyphs: Life in Ancient Mesoamerica | Preconquest cultures and civilizations of Mexico. The Aztecs, Mayas, and their predecessors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | Prerequisite(s): minimum 45 hours |
| ASB | 338 | Archaeology of North America | In-depth study of the origin, spread, and development of the prehistoric Indians of North America up to historic tribes. Does not include the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | Pre-requisites: ASB 102 or ASB 222 or ASB 223 |
| ASB | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| ASB | 340 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |
| ASB | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| ASB | 344 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| ASB | 346 | Marriage and Family Diversity | Social, economic, and cultural factors that shape family diversity in relation to generational and gender dynamics within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| ASB | 350 | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU | |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Pre-requisites: ASB 102, ASB 222, ASB 223 or ASM 104 or SSH 100 or ASB 100 with C or better. Credit is allowed for only SSH 355 or ASB 355 |
| ASB | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |

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| ASB | 361 | Pleistocene Archaeology | Biosocial evolution in the Pleistocene, emphasizing technological achievements and the relationship between technology and environment in western Europe, sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | H | |
| ASB | 362 | People and Plants | Offers a global survey of ethnobotany, the study of the uses of plants by people. Integrating botany, anthropology and archaeology, students learn about the roles plants have played as foods, tools, medicines and foci of religious devotion and ritual experience across human history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | H | Prerequisite(s): minimum 45 hours |
| ASB | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Special study will be placed on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| ASB | 368 | Hunter-Gatherers | Studies of known hunting and gathering societies with the goal of developing approaches to understanding past and/or present hunting and gathering societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 45 hours |
| ASB | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB 370, SOC 370, SOS 370, or SSH 370 |
| ASB | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101,105 or 107 with C or better; Minimum of 45 hours completed; Credit is allowed for ASB 371, ASB 394 (Inequality and Sustainability), SOS 371 or SOS 394 (Inequality and Sustainability) |
| ASB | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit for only ASB 374, POS 374, SBS 374 or SOC 374 |
| ASB | 375 | Environmental Anthropology | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and ?use? their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ASB 100, ASB 102, SSH 100, SOS 100 or SOS 110; Minimum 45 hours; Credit is allowed for only ASB 375, ASB 394 (People: Environment Connections in Anthropology), ASB 494 (Ecological and Environmental Anthropology) or SOS 375 |
| ASB | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| ASB | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretive analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| ASB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 395 | Topics in Comparative Culture | In-depth study of specific topic(s) cross-culturally. Students engage with the subject matter through critical evaluation of literature, hands-on analysis and interpretation of data, and scientific writing. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 42 hours |
| ASB | 402 | Visual Anthropology | Explores visual anthropology as a method for social documentation, and as a way to interpret cultural ways of seeing. Brings together anthropology, fine art, and art history students to exchange ideas about how we create, interpret, and communicate visual meanings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| ASB | 412 | History of Anthropology | Historical treatment of the development of the culture concept and its expression in the chief theoretical trends in anthropology between 1860 and 1950. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | |
| ASB | 417 | Political Anthropology | Comparative examination of the forms and processes of political organization and activity in primitive, peasant, and complex societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 430 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisites: AML 100 or MAT 142, 170, 210, 265 or 270 with C or better OR Mathematics Placement Test score of 50% or higher; Minimum 56 hours. Credit for only ASB 430, CPI 430, or AML 330 |
| ASB | 440 | Women in the Global Factory | Examines the impact of Third World women's incorporation into the new global division of labor in the late 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |

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| ASB | 442 | Urban Anthropology | Issues in understanding urban culture and social space from interdisciplinary anthropological perspective. May involve fieldwork. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| ASB | 443 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisite: SSH 100 or ASB 100. Credit is allowed for only ASB 443 or SSH 403 |
| ASB | 445 | Globalization, Development, and Resistance | Explores the interconnections among globalization, development, and grassroots movements for social change in Africa, Asia, and Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| ASB | 452 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only SSH 402 or ASB 452 |
| ASB | 455 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| ASB | 462 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |
| ASB | 463 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 464 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| ASB | 466 | Peoples and Cultures of Africa | Surveys African peoples and their cultures, external contact, and changes. Meets non-Western requirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| ASB | 471 | Introduction to Museums | History, philosophy, and current status of museums. Explores collecting, preservation, exhibition, education, and research activities in different types of museums. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 480 | Principles of Linguistics | Descriptive and historical linguistics. Surveys theories of human language, emphasizing synchronic linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 481 | Language and Culture | Applies linguistic theories and findings to nonlinguistic aspects of culture; language change; psycholinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 483 | Sociolinguistics and the Ethnography of Communication | Relationships between linguistic and social categories; functional analysis of language use, maintenance, and diversity; interaction between verbal and nonverbal communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASB | 485 | U.S.-Mexico Border in Comparative Perspective | Explores the multicultural and social dimensions of communities along the U.S.-Mexico border, emphasizing social organization, migration, culture, and frontier ideology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 490 | Earliest Cities | Archaeological research on the origins and development of the earliest urban centers around the world. Applies urban theory and comparative analysis. Compares ancient and modern cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 or ASB 223 with C or better; Minimum 45 hours; Credit is allowed for only ASB 490 or PUP 490 |
| ASB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| ASB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 501 | Applied Medical Anthropology | Overview of anthropology's applications in medicine and its adaptations to U.S. ethnic populations. Requires research project in medical setting. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 502 | Health of Ethnic Minorities | Prevalence of illness, risk factors, health ecology, and medical and indigenous treatments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. ASB 503/SSH 503. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | 508 | Colonial Rule and the African Experience | Impact of European colonial rule on the shaping of African consciousness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 511 | Ethics in Health Social Science Research | Ethics and social justice issues in community-based health research relevant to health social science, including informed consent, community involvement, control, advocacy. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 513 | Research Design and Proposal Writing in Health Social Science | Research design, piloting, and proposal writing for social scientists conducting health research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASB, BIO 517, BIO 591 (Uncertainty & Decision Making), POS 527 or SOS 518 |
| ASB | 525 | Introduction to Material Culture | Considers how objects embody social relationships and therefore cultural meanings. Seminar explores theories that give insight into social processes such as exchange, consumption, and identity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 529 | Culture and Political Economy | Origin and spread of Western capitalism and its impact on non-Western societies. Utilizes ethnographic and historical case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 530 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ASB 530 or SOS 553 |
| ASB | 531 | Anthropology of Development | Theories of development and the human and environmental consequences of development, with particular emphasis on rural Southeast Asia. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 532 | Graduate Field Anthropology | Independent research on a specific anthropological problem to be selected by the student in consultation with the staff. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 2-8 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 533 | Sustainable Urban Dynamics. | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SOS 532 or ASB 533 |
| ASB | 536 | Ethnohistory of Mesoamerica | Indigenous societies of southern Mexico and Guatemala at Spanish contact and their postconquest transformation. Emphasis on the Aztec Empire. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 537 | Topics in Mesoamerican Archaeology | Explores changing organization of pre-Columbian civilizations in Mesoamerica through interpretive issues, such as regional analysis, chiefdoms, urbanism, and exchange. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 540 | Scholarly Inquiry in Anthropology | Basic issues and concepts in anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student within one of the following programs in the School of Human Evolution and Social Change: Anthropology, Museum Anthropology, Social Science and Health, and Environmental Social Sciences |
| ASB | 541 | Theory in Sociocultural Anthropology | Basic issues and concepts in sociocultural anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 542 | Archaeology of Small-Scale Societies | Approaches to small-scale (i.e., hunter-gatherer and tribal) societies, archaeological method and theory, ethnography, models of human and cultural evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 544 | Settlement Patterns | Spatial arrangement of residences, activity sites, and communities over landscape. Emphasizes natural and cultural factors influencing settlement patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 546 | Pleistocene Prehistory | Development of society and culture in the Old World during the Pleistocene epoch, emphasizing technological change through time and the relationship of people to their environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 547 | Origins of Agriculture | Archaeological evidence for transitions in Old World subsistence economies from hunting and gathering to dependence on domesticated plants and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 549 | Chiefdoms | Examines archaeological evidence of chiefdoms, distinguished by hereditary leadership and non-bureaucratized decision-making elite, to illustrate emergence of social complexity, inequality. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 550 | Economic Archaeology | Prehistoric economies in hunter-gatherer, tribal, and complex societies. Covers subsistence strategies, craft production and specialization, and exchange. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | 551 | Prehistoric Diet | Critical review of techniques for recovering dietary information and theoretical models concerned with explaining diet and nutrition. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 555 | Complex Societies | Examines structural variations in hierarchically organized societies, along with origins, dynamics, and collapse. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 558 | Mortuary Practices and Cultural Analysis | Critical overview of theory and methods of reconstructing lifeways of past peoples with ethnographic/archaeological data and a bioarchaeological perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 559 | Archaeology and the Ideational Realm | Postprocessual and other views concerning relevance of mental phenomena for understanding sociocultural change. Various approaches to inferring prehistoric meanings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 560 | Theory and Archaeology | Applies social theory to archaeological study of societies of the past. Includes practice theory, hierarchy, space and place, material culture. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 563 | Hunter-Gatherer Adaptations | Evolution of prehistoric hunter-gatherer societies in the Old and New Worlds from the most ancient times through protohistoric chiefdoms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 567 | Southwestern Archaeology | Broad coverage of Southwestern cultural developments focusing on current debates and rigorous use of archaeological data in making cultural inferences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 568 | Intrasite Research Strategies | Research issues within a single site context. Topics include quantitative spatial analysis, site definition, sampling, distributional analysis, and substantive interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 570 | Immigration to the U.S. | Covers some of the major topics and issues in immigration studies with a focus on the United States. Uses both theoretical works dealing with the causes and consequences of international migration and ethnographic accounts of actual immigrant lives. Broadly interdisciplinary and incorporates perspectives from sociology, political science, economics, and other fields, emphasizes anthropological approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 571 | Museum Principles | History, philosophy, and current status of museums. Explores collecting, preservation, exhibition, education, and research activities in different types of museums. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 572 | Museum Collection Management | Principles and practices of acquisition, documentation, care, and use of museum collections; registration, cataloging, and preservation methods; legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ASB 573 or HST 573 |
| ASB | 574 | Exhibit Design and Development | Exhibition philosophies and development; processes of planning, designing, staging, installing, evaluating, and disassembling temporary and long-term exhibits. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 575 | Computers and Museums | Basics of museum computer application; hardware and software; fundamentals of database management; issues of research, collections management, and administration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 576 | Museum Interpretation | Processes of planning, implementing, documenting, and evaluating educational programs in museums for varied audience—children, adults, and special interest groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 577 | Principles of Conservation | Preservation of museum objects: nature of materials, environmental controls, and causes of degradation; recognizing problems, damage, and solutions; proper care of objects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 579 | Critical Issues in Museum Studies | Current debates of museum practice from an anthropological perspective. Addresses issues of collection, presentation, authenticity, and authority. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| ASB | | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| ASB | | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | |
| ASB | | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | |
| ASB | | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| ASB | | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| ASB | | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | | Archaeology of the Southwest | Archaeological exploration of the the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Pre-requisites: ASB 102, ASB 222 or ASB 223 or minimum 45 credit hours |
| ASB | | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | |
| ASB | | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| ASB | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| ASB | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ASC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASC | 301 | Contextual Uses of Algebra in Technology | Uses algebra to solve real-world technological problems using currently available computer software. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisites: Polytechnic BAS student |
| ASC | 302 | Contextual Uses of Geometry in Technology | Uses geometrical concepts to solve real-world technological problems using currently available computer software. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisites: Polytechnic BAS student |
| ASC | 303 | Contextual Uses of Trigonometry in Technology | Topics for close examination in selected dramatic and/or nondramatic works. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisites: College of Technology and Innovation BAS students |
| ASC | 315 | Numeracy in Technology | Contextual uses of mathematics in applied sciences. Emphasizes using mathematical methodologies to solve technology-related problems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): BAS major |
| ASC | 325 | Physical Sciences in Technology | Physical systems and their interrelationships on technology systems. Real-world applications of physical systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Pre-requisites: BAS major |
| ASC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: Polytechnic BAS student |
| ASC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| ASC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisites: Polytechnic BAS student |
| ASC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisites: Polytechnic BAS student |
| ASE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | Pre-requisites: Must be a non degree undergraduate student with less than or equal to 25 total earned hours |
| ASE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| ASE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| ASE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |
| ASE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 104 | Bones, Stones, and Human Evolution | Physical anthropology and archaeology. Evidence and processes of human evolution and of culture change. Primates. Fossil hominids and their tools. Race, variation, and heredity. Environment and human biology. Prehistoric culture and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SB or SG | |
| ASM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |

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| ASM | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201 or SSH 201 |
| ASM | 246 | Human Origins | History of discoveries and changing interpretations of human evolution. Earliest ancestors to emergence of modern humans. Humanity's place in nature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 275 | Forensic Anthropology | Discusses the role of the forensic anthropologist in medico-legal investigations involving skeletonized human remains. Includes forensic recovery techniques, identification of decedents through skeletal and dental analysis, and reconstructing the crime scene through analysis of trauma patterns. Covers the legal aspects of forensic practice and considers historical case studies and the contributions forensic anthropologists make to mass disaster investigations and human rights abuses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 300 | Anthropological Sciences Seminar | Focuses on the ways in which research findings are produced by diverse theories and methods in the anthropological sciences, usually in combination with other life and physical sciences, with a strong focus on combination anthropological conceptual frameworks with quantitative methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: BS in Anthropology major; Two of the following: ASB 102, 222 (or 223), AML 100, ASM 104 with a C or better |
| ASM | 301 | Peopling of the World | Reviews all evidence for human dispersal during the last 100,000 years, origins of language, cultures, races, and beginnings of modern humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisite: ASM 104 |
| ASM | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ASM 222; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| ASM | 338 | Anthropological Field Session | Anthropological field techniques, analysis of data, and preparation of field reports. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASM | 341 | Human Osteology | Osteology, human paleontology, and osteometry. Description and analysis of archaeological and contemporary human populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: ASM 104 with C or better; 25 minimum hours |
| ASM | 342 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| ASM | 344 | Fossil Hominids | The fossil evidence for human evolution, emphasizing the concepts and methods for reconstructing the past. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | H | Pre-requisite: ASM 104 |
| ASM | 345 | Disease and Human Evolution | Interaction of people and pathogens from prehistoric times to the present, with emphasis on disease as an agent of genetic selection. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ASM 104 or BIO 100 or BIO 181 (or BIO 188) or BIO 182 (or BIO 187) or BIO 281 or BIO 282 |
| ASM | 348 | Social Issues in Human Genetics | Moral and social implications of developments in genetic science, particularly as they affect reproduction, medicine, and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 350 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 (or 223), or GLG 101 (or 103), or GPH 111, with C or better |
| ASM | 365 | Doing Archaeology | Using hands-on analysis of artifacts and a mock site, this advanced introduction to archaeology acquaints the student with the field and laboratory methods applied by archaeologists, the information archaeologists use, and how they construct knowledge of the past. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Prerequisite(s): ASB 222 (or ASB 223 or 335 or 337) |
| ASM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |
| ASM | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| ASM | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only SOS 424, BIO 424, or ASM 424 |
| ASM | 435 | Archaeological Pollen Analysis | Theory, methodology, and practice of pollen analytic techniques. Compares uses in botany, geology, and archaeology. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |

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| ASM | 443 | Primateology | Evolution and adaptations of nonhuman primates, emphasizing social behavior. Includes material from fossil evidence and field and lab studies in behavior and biology which must be critically integrated with relevant competing theories concerning the evolution of primate behavior and biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; Minimum 56 hours. Credit is allowed for only ASM 443 or 543 |
| ASM | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: BIO 340 or ASM 301 with C or better; Credit is allowed for only ASM 546, BIO 446 or 546 |
| ASM | 450 | Bioarchaeology | Surveys archaeological and physical anthropological methods and theories for evaluating skeletal and burial remains to reconstruct biocultural adaptation and lifeways. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 104 |
| ASM | 452 | Dental Anthropology | Human and primate dental morphology, growth, evolution, and genetics. Within- and between-group variation. Dental pathology and behavioral-cultural-dietary factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SG | Pre-requisites: ASM 104. Credit is allowed for only ASM 552 or ASM 452 |
| ASM | 453 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 or 223 with C or better; ASM 104 with C or better; Minimum 56 hours; Credit is allowed for only ASM 453 or 553 |
| ASM | 454 | Comparative Primate Anatomy | Functional anatomy of the cranial, dental, and locomotor apparatus of primates, including humans, emphasizing the relation of morphology to behavior and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| ASM | 455 | Primate Behavior Laboratory | Instruction and practice in methods of observation and analysis of primate behavior. Discusses the relationship between class work on captive animals and field techniques for studying free-ranging groups. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisite: ASM 343 |
| ASM | 456 | Infectious Disease and Human Evolution | Study of infectious disease and humanity, using evidence from anthropology, history, medicine, and ancient skeletons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 345 |
| ASM | 459 | Forensic Anthropology | Applies anthropology, primarily human osteology, to legal questions, including individual identification, crime scenes, forensic reports, police work, and court testimony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 341; ASM 275; Credit is allowed for only ASM 459 or 559 |
| ASM | 460 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life, evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; ASM 341, ASM 342, ASM 344, ASM 345 or ASM 348 |
| ASM | 465 | Quantification and Analysis for Anthropologists | Statistical and quantitative strategies for envisioning and exploring archaeological, physical anthropological, bioarchaeological, and sociocultural data. Univariate and bivariate methods. A basic understanding of algebra is necessary to be successful in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | CS | |
| ASM | 472 | Archaeological Ceramics | Analysis and identification of pottery wares, types, and varieties. Systems for ceramic classification and cultural interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| ASM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 506, ASM 506 or MCB 506 |
| ASM | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 525 | Primate Paleobiology | Seminar-based survey of primate evolution, focusing on comparative biology of the extant primates and the fossil record through the Miocene. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASM | 530 | Paleoanthropology | Seminar-based in-depth study of the fossil record of human evolution and its geological, environmental, and phylogenetic contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 543 | Primatology | Advanced study of nonhuman primate behavioral adaptations, emphasizing comparative sociality, incorporating data on behavior and biology from field and captivity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit allowed for ASM 443 or 543 |
| ASM | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); credit is allowed for only BIO 446, ASM 446, BIO 546 or ASM 546 |
| ASM | 548 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 552 | Dental Anthropology | Evolutionary anthropology of non-human primate and human dentition and research from extant and extinct species of non-human primates and hominins. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 452 or ASM 552 |
| ASM | 553 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 453 or 553 |
| ASM | 555 | Advanced Human Osteology | Intensive lab course covers identification of human skeletal remains and bone fragments from archaeological contexts. Emphasizes skeletal biology, variation, anatomical landmarks, determinants of age, sex, and stature. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisite: ASM 341 or Anthropology graduate student |
| ASM | 559 | Forensic Anthropology | Applies anthropology, primarily human osteology, to legal questions, including individual identification, crime scenes, forensic reports, police work, and court testimony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 459 or 559 |
| ASM | 560 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life; evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 565 | Quantitative Archaeology | Formal methods of structuring, codifying, and analyzing data for archaeological problems. Designing research to yield data amenable to productive analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 566 | Advanced Topics in Quantitative Archaeology | Archaeological issues associated with quantitative analysis, e.g., Bayesian and Monte Carlo approaches, simulation, diversity. May be repeated for credit. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); ASM 565 |
| ASM | 568 | GIS and Spatial Technologies in Anthropological Research | In-depth survey of spatial technologies in anthropological research, including GIS, spatial modeling, remote sensing, and image analysis and classification. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree or non-degree); Credit is allowed for only ASM, BIO, or SOS 570 |
| ASM | 573 | Lithic Analysis | Analysis and interpretation of chipped stone artifacts. Focus on both techniques and underlying concepts and their application to real collections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------|
| ASM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 611 | Paleopathology | Explores patterns of disease manifested in the human skeleton and differential diagnosis of infectious, metabolic, neoplastic, congenital, and other conditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); ASM 555 |
| ASM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|---------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AST | 111 | Introduction to Solar Systems Astronomy | History, properties of light, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 112 | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 113 | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | 114 | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisite: Maximum 25 hours |
| AST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 321 | Introduction to Planetary and Stellar Astrophysics | Physical laws; celestial mechanics; properties of planets, the sun, and other stars; formation and evolution of stars and planetary systems. Both AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 or 271 with C or better; PHY 121 and 122 (or PHY 150) with C or better |
| AST | 322 | Introduction to Galactic and Extragalactic Astrophysics | Evolved stars, introduction to relativity, galaxies and interstellar matter, structure and dynamics of galaxies, cosmology. Both AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 (or MAT 271), PHY 150 (or PHY 121/122) with C or better |
| AST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 421 | Astrophysics I | Selected astrophysical topics, including stellar evolution, star formation, interstellar medium, galactic structure, extragalactic astronomy, high-energy astrophysics, and cosmology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 422 | Astrophysics II | Same range of astrophysical topics as for AST 421 but emphasizes different specific topics in a given year. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| AST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| AST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| AST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| AST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 521 | Stars and Interstellar Medium I | Radiative transfer, atomic and molecular properties, stellar atmospheres, line profiles, nonlocal thermodynamic equilibrium, interstellar gas and dust, star formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 522 | Stars and Interstellar Medium II | Stellar structure, radiative transport, boundary conditions, equations of state, nuclear reactions, opacity, nucleosynthesis, chemical evolution of the galaxy, stellar evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 523 | Stars and Interstellar Medium III | Structure of the interstellar medium, gaseous nebulae, recombination theory, ionization fronts and shock waves, galactic magnetic fields, magnetohydrodynamics, molecular clouds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 531 | Galaxies and Cosmology I | Structure and evolution of the Milky Way, stellar properties, populations and associations/clusters, interstellar medium, dark matter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 532 | Galaxies and Cosmology II | Structure of galaxies and the nearby universe, Hubble sequence, kappa-space, stellar populations, active galaxies, galaxy environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|---------------------------------------------|-------|-----------------|----------------------------------------------------------------|
| AST | 533 | Galaxies and Cosmology III | Issues in modern cosmology, the distance scale, cosmological parameters, cosmological tests, cosmic background radiation, early universe, galaxy formation and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | | Introduction to Solar Systems Astronomy | History, properties of light, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| AST | | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AST | | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| AST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| AST | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| AST | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASU | 10 | Connect: ASU Orientation | Students enrolled in the Starbucks College Achievement Plan will learn about ASU's mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Office of the Provost | 0 | | |
| ASU | 11 | ASU Online Orientation | Students enrolled in ASU Online Orientation will learn about ASU and its mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Online & Extended Campus | 0 | | |
| ASU | 19 | Jump Start | One-week program for incoming first-year students to ASU and is designed to set them up for academic success. Introduces the tools and processes that support their journey. Students learn how to connect with other students via collaborative environments. | N | LEC | N | YGB | University College | University Academic Success Programs | 0 | | Prerequisite(s): Jump Start or SPIRIT student |
| ASU | 101-AEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Aerospace Engineering undergraduate student |
| ASU | 101-BME | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering student |
| ASU | 101-BMI | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |

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| ASU | 101-CHE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Chemical Engineering major |
| ASU | 101-CHL | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CLS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): College of Letters and Sciences undergraduate student |
| ASU | 101-CON | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-CPP | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1 | | Prerequisite(s): College of Public Service and Community Solutions |
| ASU | 101-CS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): Cronkite School of Journalism and Mass Communication student |
| ASU | 101-CSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 101-CSHCD | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CTI | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): College of Technology and Innovation student |

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| ASU | 101-EEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): undergraduate Electrical Engineering student |
| ASU | 101-FSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-HDA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): Herberger Institute of Design and the Arts student |
| ASU | 101-HNR | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1 | | Prerequisite(s): Barrett Honors student |
| ASU | 101-IEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 101-LA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): College of Liberal Arts & Sciences student |
| ASU | 101-MAE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering students or Aerospace Engineering undergraduate student |
| ASU | 101-MEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering undergraduate student |
| ASU | 101-MSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |

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| ASU | 101-NCIAS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): New College of Interdisciplinary Arts and Sciences undergraduate student |
| ASU | 101-NH | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| ASU | 101-NU | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Healthcare Innovation or Nutrition student |
| ASU | 101-SOS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability student |
| ASU | 101-TE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Teacher Education and Leadership student |
| ASU | 101-UC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Prerequisite(s): College of Letters and Sciences OR University College student |
| ASU | 101-WPC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): W.P. Carey student |
| ASU | 140-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 140-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 140-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutions | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 140-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 140-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 140-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 140-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 140-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 140-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 140-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 140-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 140-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 140-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 140-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 194-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | 194-LA | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ASU | 194-NCIAS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ASU | 194-UC | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | University College | Dean, University College | 1-4 | | |
| ASU | 240-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 240-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 240-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 240-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 240-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 240-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 240-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 240-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 240-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 240-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 240-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 240-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 240-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 240-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 394-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Online Campus student |
| ATC | 230 | Fundamentals of Air Traffic Management | Introduces the manuals, procedures, maps, charts, and regulations used by air traffic controllers in the National Airspace System (NAS). | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 201 with C or better |
| ATC | 331 | Tower Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in ATC towers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 332 | TRACON Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA TRACONS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 333 | En Route Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA ATC En Route Centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 431 | Tower Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 331 with C or better |
| ATC | 432 | TRACON Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 332 with C or better |
| ATC | 433 | En Route Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 333 with C or better |
| ATC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Minimum junior standing |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ATC | 491 | Air Traffic Management Capstone | Overview of problem solution tools, quality metrics, and current technology initiatives related to air traffic management and related industry problems in a project environment. Student projects focus on airport and airspace requirements. Student teams work with partners from industry, government, and academia to define project objectives and work toward a formal recommendation to help solve the specified problem. Class discussions focus on project management, organizational structures, strategic initiatives, strategy implementation and execution. Uses review and analysis of current industry problems and resolutions to provide examples of practical solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: ATC 331, 332 and 333 with C or better; Pre/Co-requisite: ATC 431, 432, 433 with C or better if completed |
| ATE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 361 | Building Structures I | Introduces load distribution on structures. Static analysis of determinate beams, trusses, arches, and rigid frames. Computer applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisite: ADE 321 |
| ATE | 362 | Building Structures II | Strength of materials. Stresses in beams and columns. Thermal effects on structures. Analysis, design, and detailing of wood structural systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 361 with C or better |
| ATE | 451 | Building Systems I | Principles of solar radiation, heat and moisture transfer, and environmental control systems as form influences. Energy-conscious design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 421 |
| ATE | 452 | Building Systems II | Architectural design implications of heating, ventilation, and air conditioning systems. Principles of lighting, daylighting, and acoustics, and their applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 451 with C or better; Co-requisite: ADE 422 |
| ATE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ATE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| ATE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ATE | 521 | Building Environmental Science | Scientific principles relating to comfort and environmental control. Heat and moisture transfer. Solar/natural energies for heating, cooling, and lighting. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 550 | Passive Heating and Cooling | Theory, analysis, and application of passive and low-energy systems in order to maximize comfort and minimize energy consumption in buildings. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 553 | Building Systems III | Design and integration of building systems, including mechanical, electrical, plumbing, security, communications, fire protection, and transportation. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisite: ADE 521, ATE 563 |
| ATE | 556 | Building Development | Comprehensive design development through the understanding and integration of building materials and systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 522 and APH 505 |
| ATE | 557 | Construction Documents | Production of architectural working drawings; legal status, organization, layout, site survey plans, sections, elevations, details, schedules, and coordination. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 560 | Building Energy Analysis | Computer simulation of building thermal behavior. Software review. Detailed study of selected simulation models using case study projects. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 562 | Experimental Evaluation | Instrumentation, measurement and computational techniques for analysis of building components, and assessment of thermal and luminous performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 563 | Building Structures III | Analysis, design, and detailing of steel buildings and frames. Lateral analysis of small rigid and braced frame systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student |
| ATE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 582 | Environmental Control Systems | Heating, ventilation, and air-conditioning systems. Loads, psychrometrics, refrigeration cycle, air/water distribution, controls, energy performance standards, and utility rates. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ATE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ATE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AVC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| AVC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |

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| BCH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | |
| BCH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 231 with C or better OR Pre/Co-requisites: CHM 234 or CHM 334 (with C or better if completed); Credit is allowed for only BCH 361 or 461 |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCH | 371 | Modern Concepts in Biochemistry | Detailed examination of the chemical structure, conformation, and function of proteins, carbohydrates, lipids, and nucleotides; analysis of the energetics, enzymes, and control of the metabolic pathways by which these molecules are degraded or synthesized. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353, CHM 234; Credit is allowed for only BCH 371 or LSC 394 (Modern Concepts in Biochemistry) |
| BCH | 372 | Modern Concepts in Biochemistry Laboratory | Analyzes protein structure, purification, and function using spectroscopic, chromatographic, and electrophoretic methods. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: BIO 354; Pre/Co-requisite: BCH 371; Credit is allowed for only BCH 372 or LSC 394 (Modern Concepts in Biochemistry Laboratory) |
| BCH | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. May be repeated for total of 6 semester hours. | N | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | |
| BCH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| BCH | 461 | General Biochemistry | Structure, chemistry, and metabolism of biomolecules and their role in the biochemical processes of living organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 234 or 334 with C or better; Co-requisite: CHM 341 or 346 with C or better if completed; Credit is allowed for only BCH 361 or 461 |
| BCH | 462 | General Biochemistry | Continuation of BCH 461. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: BCH 461 with C or better |
| BCH | 463 | Biophysical Chemistry | Principles of physical chemistry as applied to biological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 341 or CHM 346 with C or better |
| BCH | 464 | Biophysical Chemistry Laboratory | Introduces physical methods in modern biochemistry. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: BCH 467 with C or better; Pre/Co-requisite: BCH 463 with C or better if completed |
| BCH | 465 | Protein and Nucleic Acid Biochemistry | Structure and function of proteins and nucleic acids, including protein folding, enzymology, proteomics, DNA/RNA structure, replication, transcription, and genomics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: BCH 461 with C or better; Co-requisite: BCH 462 |
| BCH | 467 | Analytical Biochemistry Laboratory | Quantitative analysis, separation and purification of biological molecules. Applies chemical and physical methods to the characterization of biological macromolecules. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | L | Pre/Co-requisite: BCH 462 with C or better if completed |
| BCH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | |
| BCH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | | Prerequisite(s): Barrett Honors student |
| BCH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BCH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| BCH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-7 | | |
| BCH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | |
| BCH | 501 | Current Topics in Biochemistry | | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: Graduate students (degree and nondegree); Credit is allowed for only BCH or CHM 520 |

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| BCH | 561 | Advanced Topics in Biochemistry | Topics selected from emerging areas of biochemistry based primarily on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 568 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 353 (or LSC 353) with C or better; CHM 231 or CHM 234 or CHM 334 with C or better; Credit is allowed for only BCH 361 or 461 (or LSC 366) |
| BCH | | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CHM 231 with C or better OR Pre/Co-requisites: CHM 234 or CHM 334 (with C or better if completed); Credit is allowed for only BCH 361 or 461 |
| BCH | | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 354 (or LSC 355); Pre- or Co-requisites: BCH 361 or LSC 366 (with C or better if completed) |
| BCH | | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCS | 101 | Elementary Serbo-Croatian | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 102 | Elementary Serbo-Croatian | See BCS 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 201 | Intermediate Serbo-Croatian | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 202 | Intermediate Serbo-Croatian | See BCS 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 311 | Bosnian/Croatian/Serbian Composition and Conversation I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 202 with C or better; Credit is allowed for only BCS 311, 394 (Serbo-Croatian Conv & Comp I) or SLC 394 (Serbo-Croatian Comp/Conv) |
| BCS | 312 | Bosnian/Croatian/Serbian Composition and Conversation II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 311 with C or better; Credit is allowed for only BCS 312 or 394 (Bosnian/Croatian/Serbian Composition and Conversation II) |
| BCS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| BCS | 495 | Serbo-Croatian for Heritage Speakers | Generates professional proficiency by developing communicative and written competency in standard literary Serbo-Croatian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |
| BDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 692 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BDE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 701 | Fundamentals of Biological Design I | Training in the essentials of fields underlying interdisciplinary research in the biosciences and in the integration of multiple disciplines in use-inspired research. Modules concentrate on key concepts and current questions in the biological sciences, physical sciences, and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 702 | Fundamentals of Biological Design II | Emphasizes the integrative areas of computational bioinformatics, systems biology, and synthetic biology, and their application in biomedical research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 721 | Integrative Research | Develops comprehensive solutions to societal problems by small interdisciplinary teams of students, including a proposal for research in an integrated science area. Covers issues of intellectual property, commercialization, societal impact and value, project management, product design, and historical examples of disruptive technological innovations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 722 | Research Design | Writing and presentation of a research proposal in the form of a grant application, peer review sessions to provide feedback, examination of the grant review and funding process. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 751 | Teaching in Science | Guidance in teaching and exposition through assisting a faculty teaching mentor in the Biological Design core course and training in oral presentation skills, including instruction in how to effectively present posters and seminars and participation in outreach experiences in the community. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| BIO | 113 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. Cannot be used for major credit in the biological sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 113 or LSC 294 t 2 (Dinosaurs) |
| BIO | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only BIO 130 or ABS 130 |
| BIO | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 151 | Biological Thinking | The science behind the science of life. Masters the core concepts of modern biology, understands the scientific discoveries that lie behind those concepts, and develops scientific reasoning skills so that students can contribute discoveries of their own. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisite: Life Sciences major with a math placement score below 50. Credit is allowed for only BIO 100 or BIO 151 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |

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| BIO | 189 | Life Sciences Career Paths | Overview of modern life sciences, including research trends, extracurricular opportunities, degree programs, and potential careers. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: School of Life Sciences Freshmen only |
| BIO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| BIO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 281 | Conceptual Approaches to Biology for Majors I | Covers the themes and concepts that underlie the molecular biology of cells and multicellular organisms as well as the biological processes that shape the diversity of organisms on our planet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Prerequisite(s): School of Life Sciences major; Pre- or corequisite(s): STP 226 (or 231) with C or better if completed. Credit is allowed for only BIO 181, 182 or 281 |
| BIO | 282 | Conceptual Approaches to Biology for Majors II | Builds upon established conceptual foundations, covers the themes and concepts underlying organismal biology, with an emphasis on physiology and ecology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): School of Life Sciences student; BIO 281; Pre- or corequisite(s): MAT 210, 251, 265 or 270; Credit is allowed for only BIO 181 or BIO 182 or BIO 282 |
| BIO | 289 | School of Life Sciences Undergraduate Research Apprentice | Students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development in this seminar. Enriches individual lab research experiences students by bringing them together in a peer-community environment. Introduces students to the resources they have at their disposal (e.g. on campus, online) to facilitate research productivity and career planning. Rigorously evaluates their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Co-requisite: BIO 310, or BIO 494 (Advanced Study Practicum), or BIO/HPS/MBB/MIC/PLB 484/492/493/495/496/499, or MIC 401 |
| BIO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 300 | Natural History of Arizona | Plant and animal communities of Arizona. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SG General Studies credit | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG | |
| BIO | 301 | Field Natural History | Organisms and their natural environment. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SG General Studies credit | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | Pre/Co-requisites: BIO 300 or LSC 310 with C or better if completed |
| BIO | 302 | Cancer—Mother of All Diseases | History of cancer; disease statistics; pathogenesis; diagnosis, treatment and prevention; case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): BIO 181 and 182 (or BIO 282) with C or better |
| BIO | 305 | Biology Behind the Crime Scene | Explores biological technology behind forensic techniques like fingerprinting, Polymerase Chain Reaction (PCR), and paternity testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: Minimum Sophomore standing |
| BIO | 306 | Modes of Biological Thought | Involves students in the process of biological discovery to examine how we identify truth in biological science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG101 or ENG 105 with C or better; BIO181 (or BIO188) and BIO182 (or BIO187) with C or better |
| BIO | 307 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy, and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. Weekend field trip required. Cannot be used for major credit in the biological sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisite: Minimum sophomore standing; Credit is allowed for only BIO 307 or LSC 294 (Dinosaurs) |
| BIO | 310 | Special Problems and Techniques | Qualified undergraduates may investigate a specific biological problem under the direction of a faculty member. | N | IND | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 311 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |
| BIO | 312 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312, IAS 340, or PHI 320 |
| BIO | 314 | Research Colloquium in Biology and Society I | Develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisites: BS Biology and Society Concentration majors: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 315 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite: ENG 102, 105, or 108 with C or better. Minimum 35 hours. Credit is allowed for only ENG 370 or BIO 315 |
| BIO | 316 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| BIO | 318 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| BIO | 319 | Environmental Science (Nonmajor) | Environmental and biological concepts applied to ecological systems with specific focus on analysis of problems caused by humans. Cannot be used for major credit in the Biological Sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | G | Pre-requisite: Junior class standing; Credit is allowed for only BIO 319 or PLB 320 |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | 321 | Introductory Ecology Laboratory | Lab and field observations and experiments to test current concepts and theories in ecology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre/Co-requisites: BIO 320 with C or better if completed |

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| BIO | 322 | Conservation Biology and Ecological Sustainability | Species-level approaches to the protection, management, and restoration of biological resources from scientific and policy perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 323 | Ecosystem Restoration and Management | Ecosystem-level approaches to the protection, management, and restoration of biota and ecosystem processes from local to global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 324 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | |
| BIO | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| BIO | 327 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| BIO | 331 | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO or LSC 331 |
| BIO | 332 | Animal Behavior Laboratory | Laboratory and field studies of animal behavior; emphasizes developing the ability to quantify animal behavior to test hypotheses for the mechanistic basis and functional (evolutionary) significance of animal behaviors. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre- or corequisite(s): BIO 331 or LSC 331 with C or better if completed |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s) with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 181 (or BIO 188 or 281 or MBB 245) and MBB 247 OR BIO 281 and 282. Credit is allowed for only BIO 340 or MBB 347 |
| BIO | 342 | General Genetics Laboratory | Explores general principles of inheritance with special reference to Mendelian, molecular, and computational genetics via lab experiments. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 340 (with C or better if completed) |
| BIO | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisite: MBB 347 or BIO 340 with C or better; Credit is allowed for only BIO or MBB 343 |
| BIO | 344 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | 346 | The Darwinian Revolution | Intellectual and cultural history of Darwinism and modern evolutionary theory and their impact on 19th- and 20th-century thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |
| BIO | 351 | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better |
| BIO | 352 | Laboratory in Vertebrate Developmental Anatomy | Morphology of representative embryonic and adult vertebrates. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Pre/Co-requisite: BIO 351 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | 354 | Cell Biology Laboratory | Investigational lab using modern molecular and cellular techniques to analyze molecular, biochemical, and anatomical traits of cells. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisite: LSC 353 or BIO 353 (with C or better if completed) |
| BIO | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 or STP 231, or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPl 480 or MBB 355. |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 361 | Animal Physiology Laboratory | Experimental lab studies of physiological mechanisms in animals and model systems. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 360 (with C or better if completed) |
| BIO | 370 | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 385 | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 386 | General Entomology | Specialized focus on form, activities, and classification of insects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |

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| BIO | 389 | School of Life Sciences Undergraduate Researcher | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment; introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: SOLS major; 3.00 GPA |
| BIO | 390 | Medical/Dental Field Placement | Field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 393 | Careers in Natural and Health Sciences | This seminar course is designed to provide students with proficiency in analyzing career options and to help students explore the full range of careers that are open to those who major at the undergraduate level in the natural sciences. The course will include short presentations by professionals in a variety of fields, including environmental biology, biotechnology, business, education, and various health sciences. There will be ample opportunities for questions and personal interactions. | N | LEC | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 188 or BIO 182; Minimum 45 hours |
| BIO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 402 | Service Learning | Provides academic enrichment and mentoring to economically disadvantaged children; related to course work in biology; requires weekly reflective reading and writing. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | C | |
| BIO | 406 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| BIO | 410 | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | 411 | Quantitative Methods in Conservation and Ecology | Quantitative methods in conservation ecology: develop mathematical models of ecological and natural resource systems and use the models to better understand and inform management of ecosystems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 320 (or BIO 322) with C or better; BIO 415 (or STP 226 or 231) with C or better; and MAT 251 with C or better |
| BIO | 412 | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | 414 | Research Colloquium in Biology and Society II | Further develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Pre-requisites: BIO 314 with C or better |
| BIO | 415 | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | 416 | Professional Values in Science | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: Grade of C or better in: BIO 187 (or both PLB 200 & PLB 201) and BIO 188. Students who have credit for HPS 410, may not enroll in BIO 416 |
| BIO | 417 | Experimental Design | Fixed, random, mixed models; crossed and nested factorial designs; balanced and unbalanced data; completely randomized, blocked, repeated measure designs; ANCOVA. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 415 with C or better |
| BIO | 418 | Soil Ecology | Soils viewed in an ecosystem context. soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: ABS 370 or BIO 320. Credit is allowed for only ABS 434 or BIO 418 |
| BIO | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only PLB 419, 519, BIO 419 or 519 |
| BIO | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| BIO | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 422 | Ecosystem Ecology | Explores the structure, development and dynamics of ecosystems, with a focus on the exchange of energy and materials between the atmosphere, soils, water, biosphere, and anthro-sphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 422 or BIO 494 (Ecosystem Ecology) |
| BIO | 423 | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |
| BIO | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ASM, BIO or SOS 424 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 425 | Marine Conservation Ecology | Marine conservation biology is increasingly important for society, as evidenced by frequent media coverage and the recent report by the U.S. Commission on Ocean Policy. Expect exposure to multiple perspectives on important conservation issues in the marine environment and gain valuable experience in critical thinking, communication skills, and the use of science in effective debate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181, 182 with C or better OR BIO 281, 282 with C or better. Credit is allowed for only BIO 425 or BIO 494 (Marine Ecology and Conservation) |
| BIO | 426 | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 427 | Fire | A survey of fire on Earth--history, ecology, behavior, and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 428 | Biogeography | Environmental and historical processes determining distributional patterns of animals and plants, emphasizing terrestrial life. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 431 | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 117 or higher or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| BIO | 435 | Research Techniques in Animal Behavior | Experimental and field studies of animal behavior; description and quantification of animal behavior and interpretation of behavior within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 331 with C or better |
| BIO | 436 | Sociobiology and Behavioral Ecology | Surveys animal and human social behavior examined from ecological and evolutionary perspectives using theoretical and empirical constructs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 331 with C or better |
| BIO | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 with C or better; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| BIO | 443 | Applied Molecular Genetics and Genomics | Nature and function of the gene; emphasizes the molecular genetic disease states; molecular biology; regulation of gene expression; genomics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: LSC 347 with C or better; CHM 233 or 331 with C or better; CHM 237 or 335 with C or better |
| BIO | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 340 or ASM 301 with C or better; Credit is allowed for only ASM 546, BIO 446 or 546 |
| BIO | 450 | Advanced Developmental Biology | Current concepts and experimental methods involving differentiation and biosynthetic activities of cells and organisms, with examples from microorganisms, plants, and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 351 with C or better |
| BIO | 451 | Cell Biotechnology Laboratory | Mammalian cell culture techniques, including mouse embryonic stem cells, the use of bioreactors, cell fractionation, and digital video imaging. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 353 (or MBB 245) with C or better |
| BIO | 453 | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |
| BIO | 455 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BMI 465 or BIO 455 |
| BIO | 456 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better. Credit is allowed for only BMI 466 or BIO 456 |
| BIO | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better. Credit is allowed for only AST 460, BIO 460, GLG 460 or MIC 475 |
| BIO | 461 | Comparative Animal Physiology | A comparative approach to understanding the function of animal physiological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 462 | Endocrine Physiology | Mechanisms of action of hormones; endocrine control of homeostasis, growth, stress responses, and reproduction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 464 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| BIO | 465 | Neurophysiology | Detailed treatment of cellular and organismal neurophysiology and nervous system function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 466 | Neurophysiology Laboratory | Intracellular and extracellular electrophysiological recording techniques, histological preparations, and dye-filling techniques. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 465 or BIO 467 (with C or better if completed) |

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| BIO | 467 | Neurobiology | Introduces major areas of neurobiology, from fundamental cellular and molecular processes through systems neuroscience and neural bases of behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 469 | Computational Neuroscience: Case Studies in Neuroethology | Introduces the use of computational methods for understanding neural function at the cellular, circuit, and systems levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 360 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 472 | Mammalogy | Classification, structure, habits, ecology, and distribution of mammals, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 473 | Ichthyology | Systematics and biology of recent and extinct fishes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 474 | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 482 | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 480 with C or better |
| BIO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BIO | 489 | School of Life Sciences Undergraduate Research Fellow | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment, introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): SOLS major; 3.50 GPA |
| BIO | 490 | Surgical Field Placement | Advanced field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 390 with C or better |
| BIO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| BIO | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, MIC, MBB, HPS or PLB 496 |
| BIO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| BIO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 502 | Transmission Electron Microscopy | Theory, use, and methods of preparing biological materials for transmission electron microscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Pre/Co-requisites: BIO 504 |
| BIO | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 504, MCB 504, or BIO 598 Special Topic: Bioimaging Current Techniques; Credit is allowed for only BIO or MCB 503 |
| BIO | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| BIO | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Pre-requisites: Graduate student; Credit is allowed for only ASM, BIO or MCB 506 |

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| BIO | 515 | Science, Technology, and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or PAF 547 or SOS 516 |
| BIO | 516 | Foundations of Bioethics | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Graduate (degree and non-degree) student. Credit is allowed for only ASB, BIO 517, BIO 591 (Uncertainty & Decision Making), POS 527 or SOS 518 |
| BIO | 518 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking). Credit is allowed for only BIO 518 or HPS or HST 516 |
| BIO | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 519, PLB 419 or PLB 519 |
| BIO | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 522 | Populations: Evolutionary Ecology | Principles of population biology and community ecology within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 524 | Ecosystems | Structure and function of terrestrial and aquatic ecosystems, with emphasis on productivity, energetics, biogeochemical cycling, and systems integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 525 | Microclimate Methods | Techniques to measure and quantify microclimate and mass transfer. Supporting principles. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 525 or PLB 525 |
| BIO | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 529 | Advanced Limnology | Recent literature, developments, methods, and limnological theory; field and lab application to some particular topic in limnology. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 543 | Molecular Genetics | Nature and function of the gene; emphasizes the molecular basis of inheritance and gene expression in prokaryotes and eucaryotes. Knowledge of general genetics recommended before registering for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 545 | Populations: Evolutionary Genetics | Mathematical models in the description and analysis of the genetics of populations | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ASM 446, 546, BIO 446 or 546 |
| BIO | 549 | Phylogenetic Biology and Analysis | Basic theory and general concepts of phylogenetic inference as well as practical, hands-on experience with many of the commonly used methods for inferring and interpreting phylogenetic trees. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 550 | Advanced Cell Biology | Applies contemporary electron microscopy and biochemical/molecular techniques for studying eukaryotic cell functions. Mechanisms of intracellular protein trafficking. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 552 | Developmental Genetics | Genetic approaches to the analysis of development during the life cycle of eukaryotic organisms, and the role of genes in the unfolding of the differentiated phenotype. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ABS, BIO 560 or MAT 561 |
| BIO | 561 | Comparative Animal Physiology | A comparative approach to understanding the function of animal physiological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BIO | 563 | Environmental Physiology | Physiological responses and adaptations of animals to various aspects of the physical environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 564 | Cellular Physiology and Signaling | Emphasizes the molecular basis for cell structure, function and intercellular signaling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ASM, BIO, or SOS 570 |
| BIO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 610 | Introduction to Responsible Conduct of Research (RCR) in Life Sciences | Introduces ethical and regulatory issues in the nine core areas of responsible conduct of research. Discusses real and hypothetical cases that tie broad ethical considerations to current concern of scientists. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 611 | Current Topics in Responsible Conduct of Research (RCR) in Life Sciences | Explores a single topic in the responsible conduct of research in depth. Topic changes depending on current issues in responsible conduct of research as well as the interests of the instructor and students. Possible topics include: responsible authorship, conflicts of interest, human subjects research, and misconduct, data management, and academic integrity. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| BIO | 614 | Biometry | Fundamental concepts of statistics and how to apply a range of standard statistical tools to the analysis of biological data. Uses the software applications SPSS and R to carry out these tests, and how to identify the particular situations in which each test is appropriate. Topics include: basic probability, descriptive statistics, estimation, hypothesis testing, t-tests, analysis of variance, regression, correlation, chi-square analysis, randomization tests, and nonparametric statistics | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BIO | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or HPS 620 |
| BIO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| BIO | | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| BIO | | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |

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| BIO | | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| BIO | | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| BIO | | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow, biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow, biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO or LSC 331 |
| BIO | | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisite(s) with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 181 (or BIO 188 or 281 or MBB 245) and MBB 247 OR BIO 281 and 282. Credit is allowed for only BIO 340 or MBB 347 |
| BIO | | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s) with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 181 (or BIO 188 or 281 or MBB 245) and MBB 247 OR BIO 281 and 282. Credit is allowed for only BIO 340 or MBB 347 |
| BIO | | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: BIO 340 with C or better |
| BIO | | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |
| BIO | | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |

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| BIO | | Ornithology | Biology of birds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | | Ornithology | Biology of birds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | | Ichthyology | Systematics and biology of recent and extinct fishes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 480 with C or better |
| BIO | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIO | | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| BIO | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| BIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 300 | Theories and Applications of Organizational Studies | Critical analysis and application of organizational theory and conceptual perspectives to identify and solve problems, emphasizing personal and organizational application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Pre-requisites: BIS in Organizational Studies student; Minimum Sophomore status; ENG 102, 105 or 108 with C or better; Credit is allowed for only BIS 300 or 394 (Introduction to Org Studies) |
| BIS | 301 | Foundations of Interdisciplinary Studies | Introduces concepts and methods of interdisciplinary study by critically examining anticipated 21st-century workplace and civic trends. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: Interdisciplinary Studies student; Minimum 2.00 GPA; Activation of BIS eligibility student group by a BIS advisor; One course meeting general studies MA requirement |
| BIS | 302 | Interdisciplinary Inquiry | Explores interdisciplinarity and integration as applied to various approaches of human inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Interdisciplinary Studies student; minimum 2.0 GPA; BIS 301 with C or better; one course meeting general studies MA requirement |
| BIS | 340 | Organizational Skills | Develops and enhances skills needed in effective organizations such as communication and the use of technology. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: Minimum Junior standing or minimum 56 hours |
| BIS | 343 | Social Processes in Organizations | Examines the interdisciplinary nature of social processes and human interactions across a number of different organizational contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Pre-requisite: Minimum Junior standing or minimum 56 hours |
| BIS | 345 | Organizational Ethics | Explores and considers normative and applied ethics within a variety of organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisite: Minimum Junior standing or minimum 56 hours |
| BIS | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Pre-requisites: Minimum 55 hours. Credit is allowed for only BIS or OGL 350 |
| BIS | 353 | Interdisciplinary Leadership | Offers interdisciplinary perspectives on the theory and practice of leadership in a range of organizational environments | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): Minimum junior standing |
| BIS | 357 | Assessment in Organizations | Considers the role and function of assessment in effective organizations. Provides the knowledge and tools required to identify, collect and analyze information to assess organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum Junior standing or minimum 56 hours |
| BIS | 360 | Organizational Contexts | Explores how organizations function by analyzing in depth a specific organizational context like health care, family, education, government, community, religion or the economy. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum Junior standing or minimum 56 hours |
| BIS | 370 | Dimensions of Liberal Studies | Critical analysis and application of concepts of liberal studies and its modes of inquiry. Prerequisite: BLS student, sophomore status; completion of first-year composition. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; Sophomore status; ENG 102, 105 or 108 with C or better |
| BIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 401 | Applied Interdisciplinary Studies | Applies interdisciplinary problem-solving skills in internships, service-learning, or research; may involve individual or group projects combining both concentrations. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies student; Minimum 2.0 GPA; BIS 301 with C or better; BIS 302 with C or better |
| BIS | 402 | Senior Seminar | Capstone course helps integrate classroom and experiential learning. Students choose among course topics that address their interests. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): Interdisciplinary Studies student; Minimum 2.0 GPA; BIS 301 with C or better; BIS 302 with C or better |
| BIS | 470 | Liberal Studies Seminar | Advanced analysis and application of theories and methods of human and social inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; BIS 370 with C or better; Senior status; ENG 102, 105 or 108 with C or better |
| BIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | OP4 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| BIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| BIS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BLE | 220 | Foundations of Structured English Immersion | Examines current educational practices and historical legal issues. Prepares teacher candidates with a provisional Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| BLE | 322 | Reading Methods in BLE/ESL Settings | Instructional/assessment strategies, including systematic, research-based phonics, vocabulary, comprehension, spelling, writing, phonemic writing in Spanish/English. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 324 | Social Studies for Diverse Language Classrooms | Social studies education standards, curriculum, and instructional strategies for English language learners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 335 | Language Diversity in Classrooms | Issues in sociolinguistics and language variation in schools with a focus on classroom interaction, instruction, curriculum, assessment, and language policy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 220; Admission to Professional Teacher Preparation Program |
| BLE | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 396; Admission to Professional Teacher Preparation Program |
| BLE | 400 | Principles of Language Minority Education | Overview of philosophical and theoretical foundations of bilingual education and ESL models of instruction. Other topics include significant legislative and judicial measures. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 407 | SEI for Secondary Students | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the 7-12 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 408 | SEI for Linguistically Diverse Learners | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the K-8 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 411 | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 412 | Mathematics Curriculum, Instruction and Assessment in BLE/ESL Settings | Teaching, management, and assessment of mathematics in K-8 BLE/ESL settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 413 | Language Arts in BLE/ESL Settings | Literacy and language arts instruction; assessment of reading and writing; transition literacy skills, particularly critical reading of content. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 414 | Bilingual/ESL Curriculum and Organization | ESL curriculum content and organization, including program model effectiveness, language assessment and language usage, special needs and parent involvement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 455 | Social Studies Methods, Management, and Assessment in Elementary BLE/ESL Settings | Examines methods, classroom management strategies, and assessment techniques for social studies instruction in elementary BLE/ESL classes. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 470 | Student Teaching Seminar | Concurrent course with the student teaching experience that provides support, content, and critical evaluation opportunities directly related to teaching practices. | N | REC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 478 | Student Teaching in Diverse Language Classrooms | Student teaching in diverse language classrooms. Focuses on use of English language learning and bilingual strategies; integrates all previous course work. Synthesized experience in curriculum instruction and classroom management in a BLE/ESL setting. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Pre-requisites: Admission to Professional Teacher Preparation Program |

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| BLE | 479 | Capstone Seminar in Bilingual/ESL Education | Reflective, experience-based integration of theory and practice; professional development for bilingual/ESL teachers. | N | SEM | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 481 | Reading Practicum | Applies concepts from BLE 414. Supervised school-based experiences in teaching reading to BLE/ESL students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| BLE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BLE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 496 | Field Experience III | Applies course content in a bilingual/ESL school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| BLE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BLE | 510 | Foundations of Structured English Immersion | Prepares teachers for linguistically diverse classrooms, including Structured English Immersion knowledge to meet the Augmented Provisional SEI Endorsement: ELL Proficiency Standards, Assessment Objectives, Foundations of SEI and SEI strategies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 511 | Introduction to Language Minority Education | Historical, philosophical, theoretical, and pedagogical foundations of language minority education in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 514 | Bilingual/Multicult-Spec Educ | Theories and issues related to the education of bilingual and culturally diverse exceptional children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 515 | Instructional Methods for Bilingual Students | Introduces general dual language teaching approaches. Focuses on the effective teaching of limited English proficient populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 520 | ESL for Children | Examines approaches to second-language development for children congruent with recent research in second-language acquisition in children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 521 | Primary/Elementary Communication Arts in Bilingual Education | Examines bilingual/biliterate development of elementary school children, bringing together native and second language, oral language, and literacy development findings with educational practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 522 | Literacy/Biliteracy Development | Acquaints teachers with first- and second-language literacy research, practice, and assessment in elementary school settings (Spanish-English emphasis) | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 524 | Secondary Sheltered ESL Content Teaching | Teaching and assessing ESL adolescents in the content areas with an emphasis on integrating language acquisition principles with content learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 526 | SEI for Elementary Schools | Prepares elementary teachers and administrators in the areas required for Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 527 | SEI for Middle and Secondary Schools | Prepares middle and secondary teachers and administrators in the areas required for Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 528 | Social Studies for Bilingual/ESL Teachers | Provides language and instructional methodologies and assessment strategies relevant to bilingual/multicultural students in social studies content delivered in Spanish and English. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 529 | Language Assessment and Evaluation of ESL/BLE Students | Assessment and evaluation of linguistic minorities; test theory, score interpretation, culturally responsive assessment, assessment of language and school achievement. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 533 | Literacy in Secondary BLE/ESL Settings | Examines first- and second-language literacy research, practice, and assessment across content areas in secondary school settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 535 | Sociolinguistic Issues in Bilingual Education | Surveys major theoretical issues (e.g., language situations, communicative competence, language attitudes) interrelating language, social processes, and bilingual education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 537 | Language Structure Acquisition | Introduces linguistics and language acquisition. Grammatical theory, language use in educational contexts; first, second, and simultaneous language acquisition. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only BLE 537 or LIN 510 |
| BLE | 541 | Nature of Bilingualism/Second-Language Acquisition | Bilingual and second-language acquisition, with emphasis on children and adolescents. Stresses cognitive, social, and cultural aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 543 | Bilingual Education Models | Bilingual education programs in other countries; analysis of political, social, economic, and educational implications; practice in planning bilingual education curricula. See also offerings under MCE, SED, SPE, and SPF. | N | LEC | N | OPT | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

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| BLE | 561 | Parent Involvement in Language Minority Education Programs | Examines issues, approaches, and strategies for improving parental and community involvement in the schooling of language minority children and youth. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 565 | Literature for Latina and Latino Children and Adolescents | Selects, analyzes, and utilizes literature for Latino/a and Spanish-speaking children and adolescents. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 578 | Student Teaching in the Elementary School | Supervised teaching in the area of specialization. Synthesized experience in curriculum instruction and classroom management in a BLE/ESL setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 597 | Capstone | Reflective, experience-based integration of theory and practice; professional development for individuals working with English language learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MA English as a Second Language major |
| BLE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

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| BLE | | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BMD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMD | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |
| BMD | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BMI major. Credit is allowed for only BMD 507 or BMI 507 or BMI 591 (Intro to Dglt Img Processing) |
| BMD | 510 | Current Perspectives in Biomedical Diagnostics | Seminar course using external speakers who review the current state of the biomedical diagnostics industry in terms of technology, regulation or legal issues. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BMD 511 or HCD 511 |
| BMD | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): BMI Graduate student; Credit is allowed for only BMD 550 or BMI 550 |
| BMD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| BMD | 667 | FDA Regulation | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OP6 | College of Health Solutions | College of Health Solutions | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BMD 667 or LAW 667 |
| BMD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 100 | Introduction to Biomedical Engineering | Introduces engineering design methods, experimental practices, data gathering, presentation and statistical analysis. Lecture/labs focus on device design and application, including hands-on experience. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Biomedical Engineering major |
| BME | 101 | Introduction to Biomedical Engineering I: Belief Systems in Engineering | Biomedical engineering is a highly interdisciplinary field with a mixture of basic science, design, and application. Reviews the process of building a knowledge base, including how we form belief systems (both founded and unfounded). Understands how the scientific process works to generate "true" knowledge of the world and the dangers of denying fact. Teaches how BME uses science as a belief system to generate innovations that improve our quality of life. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 102 | Introduction to Biomedical Engineering II | Guides the student through the transition from how knowledge is generated by the scientific process/method to how the bioengineer uses the engineering method, design tools, and interdisciplinary skill sets to translate relevant scientific and related knowledge to create new healthcare technological solutions, i.e., medical device solutions, to address unmet biomedical and health care needs for individuals, as well as for society as a whole. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Corequisite: BME 101 |
| BME | 103 | Introduction to Biomedical Engineering III: Product Design & Development | Hands-on training in and implementation of selected product design skills necessary to successfully conduct engineering medical device product design using best industry practices. Runs concurrently with BME 101 and BME 102, which introduce the underlying theory that connects the principles of the scientific method with engineering design method in the practice of biomedical product research and development (R&D). Provides the beginning biomedical engineer with a hands-on design experience that connects product design theory with product development best practices via student exposure to the core elements of the engineering design process—specifically prototype conceptualization and realization. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering major; Pre/Co-requisite: BME 101; Credit is allowed for only BME 103 or 194 (Introduction to BME III) |
| BME | 111 | Engineering Perspectives on Biological Systems | Biological concepts for the emerging engineer. Introduces biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Engineering student |
| BME | 112 | Engineering Perspectives on Biological Systems Laboratory | Introduces biological concepts for the emerging engineer in a lab setting; biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Engineering student |
| BME | 121 | Programming in Biomedical Engineering | Introduces computer programming in the context of scientific and engineering problem solving. Topics include loops, functions, pointers, data structures, and algorithms in the context of a biomedical problem. Culminates in an introduction to object-oriented programming, with a look at modern wireless (iPad and iPhone) devices for biomedical applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite: Biomedical Engineering student; Pre/Co-requisite: MAT 265 or MAT 270 |

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| BME | 182 | Biomedical Engineering Product Design and Development I | Continuation of hands-on training and implementation of medical device product design and development skills; FDA-regulated U.S. and global medical device healthcare markets and opportunities, business development in regulated environments, medical product and project management planning, exempt and Class I medical devices; medical product component and device levels, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best-industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering BSE major |
| BME | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 200 | Conservation Principles in Biomedical Engineering | Applies bioengineering analysis and problem solving of mass, energy, and charge balances to medical and biological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): BIO 181, BIO 188 or BME 111 with C or better; CHM 114 (or CHM 116) with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 275 |
| BME | 201 | Anatomy & Physiology: Cell & Tissue Physiology | Introduces the major structural and functional characteristics of individual cells and tissues in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of basic cell and tissue systems in the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical engineering student; Pre/Co-requisites: BIO 181 with C or better if completed; CHM 114, 116 or 118 with C or better if completed |
| BME | 202 | Anatomy & Physiology: Organs & Systems | Introduces the fundamental structural and functional characteristics of the major organs and systems in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of fundamental physiology of organs comprised of the five tissue types of the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 201 with C or better if completed; Credit is allowed for only BME 202 or 294 (A&P: Tissues) |
| BME | 203 | Anatomy & Physiology: Lab | Laboratory introduction to the fundamental structural and functional characteristics of the major physiological systems in the mammalian body. Physiological principles in the context of biomedical problem solving in a lab. Describes how these systems interact in healthy and diseased biological states, and identifies how simple biomedical devices interface with these systems. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 201; BME 202; CHM 114, 116 or 118 with C or better if completed; Credit is allowed for only BME 203 or 294 (A&P: Systems) |
| BME | 211 | MATLAB & Mathcad in Biomedical Engineering | Introduces the basics of MATLAB and Mathcad programming in the context of biomedical engineering conservation of mass problem solving. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; CHM 114, 116 or 118 with C or better; BIO 181 with C or better; Pre/Co-requisites: PHY 131 or 151 with C or better if completed; MAT 274 or 275 with C or better if completed |
| BME | 212 | Conservation Principles | Basics of conservation principles in complex biological applications. Subsystem approaches to render a simplified approach to solving complex system problems with known and unknown variables. Application of MATLAB and Mathcad for solving conservation problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 211 (with C or better if completed) |
| BME | 213 | Biomedical and Bioengineering Ethics | Explores ethical issues in biomedical and medical sciences and engineering practices and includes professional ethics, medical ethics, engineering ethics and the Biomedical Engineering Society (BMES) Code of Ethics, the ethics of human and animal tissue and subjects use in biomedical science and engineering research, responsible conduct for research, ethical issues in the design and manufacture of medical devices for developing and developed countries, and the impact of biomedical engineering solutions on society and the environment. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 214 | FDA Regulatory Processes and Technical Communications | Develops writing skills to factually and effectively communicate all facets of biomedical product design and development activities that are required to successfully conceive, develop, and launch a medical device into the market place using the FDA quality systems best practices that are utilized by the health care technology industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): ENG 102, 105, or 108 with C or better if completed |
| BME | 235 | Physiology for Engineers | Physiology of the nervous, muscular, cardiovascular, endocrine, renal, and respiratory systems. Emphasizes use of quantitative methods in understanding physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering major; BIO 181, BIO 188 or BME 111 with C or better, CHM 114 or 116 with C or better; Pre/Co-requisites: PHY 131 and 132 |
| BME | 282 | Biomedical Engineering Product Design and Development II | Hands-on training and implementation of product design skills that combine virtual analytical model prototype development with component and sub-assembly integration to develop both virtual and physical prototypes of a medical device product at the product architecture level and verify selected product architecture specifications from design input and earlier design process verification steps. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering major |
| BME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |

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| BME | 300 | Bioengineering Product Design | The fundamentals of financial and organizational structure of business and how it influences bioengineering analysis, design, and decision making; biomedical ethics and device and drug regulation; and fundamentals of business and technical management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering Junior, Senior or Post-Bac; BME 100 (or BME 101 and 102 and 103 OR BME 194 Introduction to BME I and II and III) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 301 | Numerical Methods in Biomedical Engineering | Applications of numerical methods to biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Biomedical Engineering student; MAT 274 (or MAT 275) with C or better |
| BME | 302 | Biomaterials/Physicochemical Properties | Introduces the science and engineering of biomaterials; addresses material properties of natural and artificial biomaterials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; PHY 121 (or PHY 150) with C or better; Pre/Co-requisite: BME 203 (with C or better if completed) |
| BME | 303 | Biological Response to Implanted Biomaterials | How biomaterials interact with surrounding tissue; biocompatibility. Also discusses specific clinical problems that are treated using implants. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 302 (with C or better if completed) |
| BME | 311 | Basic Concepts of Signals and Systems in Biomedical Engineering | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; EEE 202 with C or better; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 312 | Transforms for Biomedical Engineering Applications | Introduces properties of discrete and continuous transforms for the purpose of analyzing signals and applying the transforms to solve biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student. Pre/Co-requisite: BME 311 (with C or better if completed) |
| BME | 313 | Preclinical and Clinical Trials in Biomedical Engineering | Explores the rationale and the tools required to evaluate the safety and efficacy of medical devices designed and developed using best industry practices for human consumption. Introduces the design and conduct of pre-clinical trials (in vitro, ex vivo or in vivo systems other than humans), as well as clinical trials that are required for FDA approval to market medical devices in the U.S. Covers the following topics: an overview of medical device development; FDA regulatory affairs and practices; ethics concerns in animal and human trials; experimental design and biostatistics for medical device preclinical and clinical studies; preclinical (IACUC) and clinical trial (IRB) approval; informed consent best practices; medical device preclinical and clinical trial management; recruitment of clinical study participants and populations; ethics of preclinical and clinical trials; and alternatives to animal and human trials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 213 or BME 294 (Biomedical and Bioengineering Ethics) with a C or better |
| BME | 318 | Biomaterials | Material properties of natural and artificial biomaterials. Tissue and blood biocompatibility. Uses of materials to replace body parts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering BSE student; CHM 114, 116, or BIO 181 (or BME 111 or BIO 188) with C or better; MAT 274 (or 275) with C or better |
| BME | 321 | Probability for Biomedical Engineering | Introduces probability distributions in the context of basic biological phenomena and biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 322 | Statistics for Biomedical Engineering | Introduces parametric and nonparametric statistics tests in the context of common biomedical experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering major; MAT 274 (or 275) with C or better |
| BME | 331 | Transport Phenomena for Biomedical Engineering | Transport phenomena with emphasis on momentum, energy, and mass transport in living systems, medical devices, and other therapeutic/diagnostic applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering student; BME 200, 212 or 294 (Conservation Principles) with C or better; MAT 274 (or 275) with C or better; PHY 121 with C or better |
| BME | 341 | Engineering Design Method | Covers the engineering design method, a collection of valuable design tools, and the application of the method and tools to address current problems in the field of biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 342 | 3D Spatial Modeling | 3D spatial modeling tools applied in the context of biomedical engineering to create computational models of idealized and anatomical biological structures (e.g., blood vessels). | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; BME 203 or 294 (Cell Tissue Physiology) or 294 (A&P: Tissues) or 294 (A&P: Systems) with C or better |
| BME | 350 | Signals and Systems for Bioengineers | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Biomedical Engineering major. Pre- or corequisite(s): MAT 274 (or MAT 275) with C or better |
| BME | 351 | Circuits for Biomedical Engineering Instrumentation | Circuits is a specialized skill that is developed for students interested in building devices which serve as electrical interfaces to the body. These are interfaces which have very specialized requirements. Students who have been familiarized with the basics of electrical circuit design as well as physiology learn some of the issues that arise and solutions that have been generated to provide for these interfaces. | N | LEL | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 312 or BME 394 (Transforms For BME Apps) with C or better |
| BME | 352 | Filtering of Deterministic and Stochastic Signals | Introduces properties of deterministic and stochastic signals and their use in biomedical signal processing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 312 or BME 394 (Transforms For BME Apps) with C or better if completed |
| BME | 353 | Microcomputing & Embedded Systems for Biomedical Engineering | Introduces the use of microcontrollers to analyze biological signals. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 352 (with C or better if completed) |
| BME | 361 | Design of Experiments and Clinical Trials | Explores advanced techniques in trial and experimental design in biomedical engineering, including testing new products or drugs, or even generation of new methods and treatments, designed to provide statistical confirmation at the end of trials. Design of trials, experiments, and measures, so that efficacy can be properly evaluated using statistical tests. Although this course makes reference to regulatory procedures, emphasizes the proper application of statistical techniques in the design of experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; BME 322 or BME 394 (Statistics For BME) with C or better |
| BME | 370 | Microcomputer Applications in Biomedical Engineering | Uses microcomputers for real-time data collection, analysis, and control of experiments involving actual and simulated physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering major; EEE 202 with C or better; Pre/Co-requisites: BME 350 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BME | 382 | Biomedical Engineering Product Design and Development III | Continuation of hands-on training and implementation of medical device product design and development skills; experimental practices, data gathering, presentation, and statistical analysis in regards to demonstration of validation and verification tools and testing, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: BME 282, or BME 213 and 214; credit is allowed for only BME 382 or BME 494 OR 598: Prototyping Dsn to Mkt |
| BME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 401 | Biomedical Engineering Product Design & Development: Capstone | Introduces global biomedical engineering design factors that affect the selection and implementation of medical device product innovation, design, and development using best industry practices. These include technical, regulatory, economic, legal, business, entrepreneurial, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 313, BME 331, BME 341, BME 342, BME 353 and BME 361 with C or better |
| BME | 402 | Biomedical Engineering Product Design & Development: Capstone II | Introduces project management and product innovation, design and development processes and their best practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 401 (with C or better if completed) |
| BME | 403 | Biomedical Engineering Product Design & Development: Capstone III | Introduces conceptual product design and development best practices using three-dimensional modeling and other design tools for the determination of product specifications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Biomedical Engineering student; Pre/Co-requisites: BME 401 and 402 (with C or better if completed) |
| BME | 404 | Biomedical Engineering Product Design & Development: Capstone IV | Introduces entrepreneurial biomedical product development business practices for successful quality systems premarket submission of a verified detailed medical device design of a capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 403 or BME 494 (Capstone III) with C or better |
| BME | 405 | Biomedical Engineering Product Design & Development: Capstone V | Introduces prototyping of the capstone device and begins experiments of the device prototype. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 404 (with C or better if completed) |
| BME | 406 | Biomedical Engineering Product Design & Development: Capstone VI | Addresses prototype device verification and validation methods to achieve a robust design; the conclusion of the capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 404 and 405 (with C or better if completed) |
| BME | 413 | Biomedical Instrumentation | Principles of medical instrumentation. Studies of medical diagnostic instruments and techniques for the measurement of physiologic variables in living systems. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | L | Pre-requisites: Biomedical Engineering major; BIO 201 and 202 (OR BME 201 and 202 and 203 or BME 235) with C or better; BME 350 with C or better |
| BME | 416 | Biomechanics | Mechanical properties of bone, muscle, and soft tissue. Static and dynamic analysis of human movement tasks such as locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Bioengineering or Pre-Med Engineering BSE student; BME 318 and MAE 212 with C or better |
| BME | 417 | Biomedical Engineering Capstone Design I | Technical, regulatory, economic, legal, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | L | Pre-requisite: BME 300, 318, 331 and 370 with C or better; IEE 380 (or BME 322) with C or better |
| BME | 419 | Biocontrol Systems | Applies linear and nonlinear control systems techniques to analysis of neuromusculoskeletal, cardiovascular, thermal, and mass transfer systems of the body. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 350 and BME 370 with C or better |
| BME | 421 | Biomedical Instrumentation I | Introduces principles of biomedical instrumentation and techniques of physiologic measurement as used in medicine and biology. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 341 and 353 with C or better |
| BME | 422 | Biomedical Instrumentation II | Principles of biomedical instrumentation and techniques as used in medicine and biology with an emphasis on medical diagnostic imaging. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): BME 421 with C or better if completed |
| BME | 423 | Biomedical Instrumentation Laboratory | Lab experience with problems, concepts, and techniques of biomedical instrumentation in static and dynamic environments. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | L | Pre-requisite: Biomedical Engineering student; Co-requisite: BME 413 |
| BME | 434 | Applications of Bioengineering Transport Phenomena | Develops mathematical models of transport phenomena in physiological systems, medical devices, and pharmacokinetic analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 331 with C or better |
| BME | 451 | Cell Biotechnology Laboratory | Mammalian cell culture techniques, including mouse embryonic stem cells, the use of bioreactors, cell fractionation, and digital video imaging. | N | LEL | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: BIO 353 (or MBB 245) with C or better |
| BME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BME | 490 | Biomedical Engineering Capstone Design II | Individual projects in medical systems or medical device design and development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 417 with C or better |
| BME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| BME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-7 | | Pre-requisite: Bioengineering or Pre-Med Engineering BS or BSE student |

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| BME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 520 | Bioelectric Phenomena | Study of the origin, propagation, and interactions of bioelectricity in living things; volume conductor problem, mathematical analysis of bioelectric interactions, and uses in medical diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 521 | Neuromuscular Control Systems | Overview of sensorimotor brain structures. Application of nonlinear, adaptive, optimal, and supervisory control theory to eye-head-hand coordination and locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 522 | Biosensor Design and Application | Theory and principles of biosensor design and application in medicine and biology. Principles of measurements with biosensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 524 | Fundamentals of Applied Neural Control | Fundamental concepts of electrical stimulation and recording in the nervous system with the goal of functional control restoration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 525 | Surgical Techniques | Principles of surgical techniques, standard operative procedures, federal regulations, guidelines, and state-of-the-art methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Graduate Engineering students only |
| BME | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 534 | Transport Processes II | Continuation of BME 533 or CHE 533, emphasizing mass transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 543 | Thermodynamics of Chemical Systems | Classical and statistical thermodynamics of nonideal physicochemical systems and processes; prediction of optimum operating conditions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| BME | 566 | Medical Imaging Instrumentation | Design and analysis of imaging systems and nuclear devices for medical diagnosis, therapy and research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Pre-requisites: Graduate Bioengineering students only |
| BME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BME | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 101 | Introduction to Bioinformatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Introduces topics in translational bioinformatics, such as sequence alignment, the Human Genome Project, gene expression analysis, genome-wide association studies, next-generation sequencing. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 102 | Introduction to Public Health/Imaging Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Second course in a three-semester series focusing on biomedical informatics applications in public health, including population studies and outbreak detection, and medical imaging, including telemedicine. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: BMI 101 with B or better |
| BMI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 201 | Introduction to Clinical Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Provides an introduction to biomedical informatics techniques and applications used in clinical environments. Includes searching and organizing free text information, decision analysis techniques and clinical decision support systems, and clinical applications including physician order entry used in electronic medical records. Also covers challenges in clinical informatics, including sociotechnical and cognitive issues in implementation and use. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 211 | Modeling Biomedical Decisions | First semester of a three-semester course sequence surveying the methods and theories underlying the field of biomedical informatics. Explores models of medical decision making, including classical decision theory, Bayesian, and cognitive models. Also includes a component discussing evaluation methods in biomedical informatics. | N | PRA | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 221 | Knowledge Representation for Biomedical Informatics | Introduces topics in knowledge representation and modeling, including frame-based systems, logic-based systems, rule-based systems, inference, and reasoning. Overview of history and present state of the field. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 301 | Clinical Environments | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and exposes students to the clinical environments in which health care providers create, manage, and use clinical information. Students attend lectures and spend a significant portion of time examining and reporting on different clinical settings throughout the semester. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 311 | Modeling Biomedical Knowledge | Introduces concepts of artificial intelligence and knowledge modeling using medical informatics examples. Historical foundations and motivations of AI in medical applications; problem solving, reasoning, knowledge management, and planning as applied to medical informatics problems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 312 | Modeling Biomedical Data | Third semester of a three-semester course surveying the methods and theories underlying the field of biomedical informatics. Explores methods of use in the design and maintenance of biomedical databases, machine learning techniques, information retrieval in biomedicine and other methods specific to bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 330 | Topics in Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medicine research. Topics include bioinformatics data acquisition and management, including microarrays, database modeling and integration; analysis methodologies, including statistics and data mining; and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |

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| BMI | 332 | Team Dynamics for Healthcare IT Projects | Teaches the fundamentals of leadership, management, and team dynamics in a project-focused software engineering environment, and with a focus on informatics and healthcare applications. Teaches students about team and group dynamics, recognizing dysfunctional teams, and helping to foster productive group and leadership skills. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 461 | Advanced Topics in Biomedical Informatics I | Covers current trends and cutting-edge research areas of clinical, public health, and consumer health informatics. Particular emphasis on research that is of relevance to patients, and the healthy public, covering such topics as outbreak detection and the personal health record. Also covers research on the use of technology in medical education, and the ways in which clinical decision support systems are applied in contemporary medical practice. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 462 | Advanced Topics In Biomedical Informatics II | Covers current trends and cutting-edge research areas of bioinformatics, imaging informatics, and translational science. Emphasizes informatics approaches to the novel data sources that are supplied by the next generation of methods for affordable gene sequencing, and initiatives underway to accelerate the integration of novel research findings into everyday clinical practice. Includes a series on modeling and simulation, current approaches to computer-aided diagnosis of medical images, ways in which technology can support the discovery of new knowledge, and the application of telemedicine to remotely facilitate clinical care. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 465 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Credit is allowed for only BMI 465 or BIO 455 |
| BMI | 466 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better. Credit is allowed for only BMI 466 or BIO 456 |
| BMI | 482 | Capstone I | First course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of a research project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | |
| BMI | 483 | Capstone II | Second course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of an applied project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | Pre-requisite: BMI 482 with C or better |
| BMI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | |
| BMI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | | |
| BMI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | L | |
| BMI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-7 | | |
| BMI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-3 | | |
| BMI | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMI | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |
| BMI | 504 | Introduction to Clinical Environments | Course is divided into three sections. The first section covers medical and health care concepts and terms, and discuss observational techniques. In the second portion, students investigate a variety of different clinical environments and report back to the class on their findings. The final portion summarizes the key points of information technology in these clinical environments. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 505 | Foundations of Biomedical Informatics Methods II | Second semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI 502 with C or better; BMI Graduate student |
| BMI | 506 | Clinical Decision Support | The course will provide an in-depth analysis of computer-based approaches to supporting clinical decision making for providers and patients (as well as healthy individuals, for disease prevention/health maintenance). The history of the field of clinical decision support (CDS) and the spectrum of methodologies will be reviewed. Practical issues involved in successful implementations of CDS will be discussed. The roles of standards and infrastructure will be examined. Current research topics and foci will be explored. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |

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| BMI | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BMI major. Credit is allowed for only BMD 507 or BMI 507 or BMI 591 (Intro to DgItl Img Processing) |
| BMI | 515 | Applied Biostatistics in Medicine and Informatics | Comprehensive treatment of the statistical methods used most often to analyze quantitative data collected in medical and biomedical informatics studies, including clinical trials, epidemiologic studies, studies of the accuracy and performance of screening and diagnostic tests, and studies to develop predictive models. Students learn to use SAS statistical software to analyze biomedical data. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 516 | Advanced Biomedical Data Analysis | Acquisition, conversion and organization of biological data into relevant diagnostic, therapeutic, and research information using information extraction and data mining. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 501 with C or better |
| BMI | 520 | Modeling Gene Regulatory Networks | Computational and mathematical modeling used to approximate gene regulatory networks as well as signaling pathways and inference of model parameters. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 505 and BMI 516 with C or better |
| BMI | 540 | Problem Solving in Biomedical Informatics | Theory and practice of software engineering principles as they apply to large- and medium-scale clinical systems from bench to bedside. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 501 with C or better |
| BMI | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): BMI Graduate student; Credit is allowed for only BMD 550 or BMI 550 |
| BMI | 555 | Medical Information Management | Database theory and information management systems with applications to biomedical domain, including use of databases in the Web context. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; CSE 412 |
| BMI | 560 | Teaching in Biomedical Informatics | Student serves as a teaching assistant with a faculty member who is teaching either a required or elective course in the Biomedical Informatics curriculum. Such courses will generally be BMI courses but with the approval of the student's faculty program advisor may include a course that is an approved elective in the BMI program but is offered in another department within the university. The experience provides a significant teaching role, either lecturing or moderating small group sessions or laboratories. Grading class homework assignments and designing/grading examinations will also typically be part of the experience. Assisting other students outside of class and being available during office hours will also generally be part of the student teacher's role. A student may also receive 1 hour of credit for participating substantively in the design of a new course, working closely with a faculty member. Generally in such circumstances the student should then serve as course teaching assistant when it is offered for the first time (separate enrollment in this course). | N | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Biomedical Informatics PhD student |
| BMI | 570 | BMI Symposium | Students attend the BMI Symposium Speaker Series twice a month and the student journal club discussion on alternate weeks. During the journal club weeks, each student leads a discussion on a current topic pertinent to the field of biomedical informatics. | N | SEM | Y | YGB | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: BMI Graduate student |
| BMI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: BMI Graduate student |
| BMI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | GNA | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Biomedical Informatics Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 601 | Fundamentals of Biomedical Informatics | Offers an overview of the field of biomedical informatics. Combines perspectives from medicine and computer science for use of computers and information in healthcare and the biomedical sciences. Covers specific applications and general methodology in biomedical informatics using current topics in the field. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 602 | Programming in a Healthcare Domain | Intensive introduction to object-oriented programming concepts focused on the unique challenges such as those related to data volume, complexity, and uncertainty inherent to applications in a healthcare domain. Also covers the fundamentals of algorithm analysis and data structure design. Stresses a software engineering approach to abstraction for problem decomposition and solution formulation, with object-oriented and reusability concepts introduced early. Emphasizes the use of generic data structures and abstractions from template libraries for reusability, as well as modular design. In addition, also covers basic concepts of algorithms and data structures. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 603 | Health Informatics Database Modeling and Applications | Thorough coverage of the foundations of database systems and their specific use and modeling in healthcare and biomedical environments. Students learn through hands-on experience with the modeling and implementation of health-related databases using the relational approach. Topics include an overview of database models and architecture, database design, SQL, XML, and data warehousing as they are applied in clinical domains. Students are encouraged to explore database-related topics of their own, choosing ones that are relevant to a bioinformatics or clinical domain. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 604 | Health Information Literacy | Students learn to locate, retrieve, and store information with an emphasis on electronic search, retrieval, and storage. They also learn to assess the validity and quality of information, improve the quality of information, and how to improve the quality of, protect, and effectively communicate health information. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 605 | Health Information Systems and Applications | Explores the use of information systems in different healthcare settings, analyzing operational and strategic objectives for their deployment. Emphasizes the analysis of the different factors that influence decision making during the process of design and deployment of systems, including human factors, hardware, software, policy, communications, and the successful management of such systems. Also covers guidelines for the design and successful deployment of systems to meet those objectives and includes discussion of architectures, components, and models. Analyzes specific case studies of successfully and unsuccessfully deployed systems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 606 | Health Data Standards | The cost-effective delivery of high quality, safe healthcare requires access to multiple data sources and systems and applications responsible for data acquisition and management, the ability to aggregate, integrate, and analyze data from multiple sources, and the ability to communicate the results of such analyses or the knowledge resulting from those analyses to users in a timely fashion at points where they are needed. A variety of standards are required, at the data and communication level. Reviews the state of these standards, and the multiple entities that have a stake in them, and enables the student to navigate this complex process in selecting, implementing, or extending health systems in a variety of settings. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Health Informatics MAS student |
| BMI | 607 | Effective Professional Communications | To be able to work in the field of biomedical informatics or health information technology requires an understanding of not only science and technology but also biomedicine and healthcare. This requires both familiarity with the basic concepts of these fields, as covered in other courses, as well as the ability to present ideas clearly in both written and oral communication. Also requires the ability to work effectively in groups, with shared understanding of group and individual roles, assignments, and responsibilities. Provides experience with oral, written, and group communication tasks, and uses critique and feedback as a method for highlighting issues and areas for improvement. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |

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| BMI | 608 | Project Management for Interdisciplinary Teams | Introduces students to the healthcare team and explores tools and techniques for establishing effective interdisciplinary teams in a healthcare setting, emphasizing collaborative clinical decision-making and patient management. By working in small teams, the course puts into practice these techniques, allowing students to collaborate with other health professionals to solve specific problems, provide services, or develop new understandings. Also covers the concepts, skills, tools, and techniques involved in the management of information system projects, providing an introduction to the established discipline of project management, with a specific focus on how they apply to managing information systems for a biomedical setting. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 609 | Capstone | This course assists students in preparing their capstone project, which represents the culmination of their study for the MAS in Health Informatics focusing on development process, technical skills, and communication. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 610 | Clinical Culture and the Healthcare Environment | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and reviews clinical environments in which healthcare providers create, manage, and use clinical information. Students perform observations in a variety of clinical environments. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 611 | Applied Data Analysis | Students learn what statistical methods are used most widely in the analysis of data from studies of disease risk factors, health interventions, and healthcare improvements, and what statistical methods should be used to analyze data from various types of studies. They learn how to estimate the number of subjects needed for studies of various designs. They learn to conduct and interpret multiple linear, multiple logistic, and multivariate life-table analysis. Hands-on experience in the use of statistical software to conduct analysis of health data. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 612 | Applied Data Mining in Biomedicine | Comprehensive introduction to data mining methods and algorithms used most often to analyze data collected in biomedical informatics studies, including genomics and proteomic disease association studies, clinical trials, clinical image analysis and studies of the accuracy and performance of screening and diagnostic tests. Emphasizes assessing data quality, understanding how to select an overall approach to analysis, and presenting and interpreting the results of data mining analysis. Uses Excel to effectively display data collected in biomedical research studies and Weka to analyze data using approaches that are used commonly in biomedical studies. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 613 | Workflow Analysis and Redesign in Health Systems | Provides an overview of workflow analysis and process redesign and their use in quality improvement activities, including specification. Uses case examples to highlight key concepts and covers measurement concepts and techniques. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 614 | Health Systems Engineering | Focuses on the links of systems engineering to fundamentals of decision theory, statistics, and optimization, and includes discussion of current successful techniques for systems engineering. System Engineering seeks to enable the successful design, implementation, deployment, and maintenance of successful systems. Emphasizes gathering and analysis of customer needs for the specification and documentation of required functionality early in the system's lifecycle. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 615 | Human Factors Engineering for Biomedical Applications | Fundamental principles of human-computer interaction and human factors and how to apply them to real world problems through class projects, homework, and real-world design. Focuses on learning why user-friendly interfaces can greatly improve work productivity and enhance the quality of healthcare without radically changing the underlying technology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 616 | Clinical Decision Support | Focuses on the major problems of human decision making in healthcare, including causes of errors, decreased quality, and increased costs. Also explores the role of information technology, primarily through computer-based clinical decision support (CDS), to address these problems. Explores key methods used to provide CDS, the capabilities and limitations of current approaches, and the challenges for managing and updating the knowledge needed to deliver CDS in an enterprise setting. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 617 | Principles of Evidence-based Medicine | The origins of evidence-based decision making and policy formulation; how to use the tools and approaches that have been developed to support evidence-based decision making and policy formulation. The history and evolution of systematic review and meta-analysis as a tool to inform decisions and policies based on evidence. Hands-on experience by conducting a systematic review and a meta-analysis and using the results to draw conclusions and formulate policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |

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| BMI | 618 | Leadership and Change in Clinical Environments | Covers core concepts related to leadership and specific methodologies used by effective leaders, including running meetings, negotiation, and conflict management. Also reviews change management as a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. Provides exposure to various models and processes related to change management and the tradeoffs between these different approaches. Includes case examples related to health information. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 501 | Essentials of Biomimicry | Offered as a sampler of the various topics (discipline, emulate, ethos, (re)connect and iSites, human-nature connection, biomimicry thinking, and life's principles) within the discipline of biomimicry. Each week is devoted to a specific topic and is led by a different instructor. Provided a basic overview of each aspect of the discipline with ample opportunity for conversation and dialogue around the specific components, with an understanding that greater depth into each topic can be learned by taking the advanced BMY courses. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 502 | Life's Principles | Life's principles are nature's universal design guidelines based on 3.8 billion years of successful strategies across all life. With instruction by Dr. Dayna Baumeister, this 16-week online course takes participants on a deep dive of life's principles, including the review and study of life's operating conditions, the six primary principles and their related sub-principles. Gives participants the experience necessary to bring these design guidelines into practice. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 503 | Biology Taught Functionally | Biomimicry teaches biology through the lens of function, thereby providing a core understanding in biology for all students, no matter their background. Explores how biologists gather and research information and how that knowledge can inform other disciplines. Also introduces the art of translating biological concepts into strategies for application, which is then carried throughout all the courses. Students learn how to work with biologists on a biomimicry team and how to weave biology and biomimicry together. The biologists in the cohort not only learn to look at nature through the function lens, but also act as subject matter experts for their interdisciplinary teams and teaching assistants. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 504 | Biomimicry Thinking | Biomimicry thinking is the practice of biomimicry from a methodology-based approach. 16-week intensive in the methodology of biomimicry reviews how biology and biomimicry can be incorporated into the four major phases of any design process: scoping, discovering, creating and evaluating. Covers the art of translating biological concepts into strategies for application and building a taxonomy of design principles. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 330 | Organizational Leadership | Strategies, skills, and techniques that promote successful leadership within organizations. Practice leadership skills and self-discovery in preparation for leadership positions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| BUA | 380 | Small Business Leadership | Develops leadership skills needed to form, lead, and operate a small business. Emphasizes creating a vision, research, and problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 381 | Small Business Accounting and Finance | Accounting and finance skills needed by small business owners to acquire, allocate, and track monetary resources and evaluate performance. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. Must not have earned credit in ACC 382. |
| BUA | 383 | Small Business Working Relationships | Addresses communication and the people in a business—clients, employees, suppliers, competitors, governments, family, and self development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 384 | Small Business Operations and Planning | Planning and executing plans—the what, when, where, how, and who from product/service/project idea to pay back or completion. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 440 | Strategic Management | Strategic formulation and administration of the total organization, including integrative analysis and strategic plan; interrelationship of business functional areas. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better; Credit is allowed for only AGB 414, BUA 440 or 441 |
| BUA | 441 | Entrepreneurship and Feasibility | Assessment of the opportunities, risks, and challenges associated with business start-up and continued operation. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better; Credit is allowed for only AGB 414, BUA 440 or 441 |
| BUA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BUA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | | |
| BUA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BUE | 480 | Teaching Business Subjects | Organization and presentation of appropriate content for business subjects in the secondary school. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 481 | Technology in Business and Vocational Education | Emerging curricula and instructional technology in business and vocational education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 502 | Organization and Management of Cooperative Programs | Work-study programs for business occupations in high schools and community colleges. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| BUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| BUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| BUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BUS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| CBS | 520 | Modeling and Computational Biology | Key mathematical and computational techniques for bioinformatics. Numerical and visualization software; scripting, database management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 521 | Applications and Complex Problem Solving in Computational Biology | Continuation of CBS 520. Key mathematical concepts. Team solution of bioinformatics applications, project writing, and presentation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Pre-requisite: CBS 520 with B or better |
| CBS | 530 | Introduction to Structural and Molecular Biology | Structure and function of cells, proteins, membranes, and the genome; gene expression and biogenesis of structures; application of computer imaging. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 540 | Functional Genomics | Functional relevance of genomic sequences; DNA arrays, proteomics, analysis of genomic information for metabolic physiology of organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| CBS | 572 | Data Mining | Advanced data mining techniques: classification, clustering, association, preprocessing; performance evaluation; information assurance, Web mining, security and privacy issues, and other applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CCS | 446 | Teaching Chicana and Chicano Studies in the Schools | Approaches/techniques for infusion of Chicana and Chicano Studies content into elementary and secondary curriculum; designed for teachers who work with Chicana and Chicano students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CDE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| CDE | 232 | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| CDE | 337 | Early Childhood Intervention | Explores how child development theory affects practice with children and families, emphasizing development of young children and early intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| CDE | 338 | Child Development Practicum | Supervised practicum in the Child Development Lab preparing students for work in child care centers and agencies serving young children and families. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 2-4 | | |
| CDE | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| CDE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better; Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDE | 430 | Infant/Toddler Development in the Family | Examines the development of infants/toddlers, the socialization processes of families, and the interactions of these processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 437 | Infant Family Assessment and Observation | Examines strategies for implementing developmental assessments and observations of young children and their families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | |
| CDE | 444 | Risk and Variation in Child Development | Impact that constitutional and environmental risk factors have on young children and their families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| CDE | 450 | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better; Minimum Junior standing |
| CDE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| CDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| CDE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | L | |
| CDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| CDE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| CDE | 531 | Theoretical Issues in Child Development | Major developmental theories, related research, and their application to family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 533 | Research Issues in Child Development | In-depth exploration and critique of research focusing on child development in a family setting. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 534 | Risk and Resilience in Children and Adolescents | Integrates child development, family theory, and research to understand risk and resilience in children and adolescents. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 531; FAS 500 |
| CDE | 570 | Child Development for Infant Family Practice | Examines development during infancy and early childhood with emphasis on social and emotional development, mental health, and early parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 571 | Infant Mental Health for Infant Family Practice | Surveys the biological and environmental risk factors that jeopardize the mental health of infants and young children; overview of prevention and intervention strategies. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CDE | 572 | Assessment of Infants, Toddlers, and Families for Infant Family Practice | Developmentally appropriate assessment of mental disorders and developmental disabilities in infants, toddlers, and preschool children and parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 573 | Cultural Competence for Infant Family Practice | Examines cultural issues impacting parent-child relationships and child rearing and the effectiveness of infant mental health and early intervention services on families of various ethnic and cultural backgrounds. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 574 | Observation and Reflection for Infant-Family Practice | Strategies for observing infant behavior and parent-child relationships and skills for reflective, relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 575 | Advanced Observation and Reflection for Infant-Family Practice | Advanced strategies for observing infant behavior and parent-child relationships and skills for reflective relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 576 | Applied Research Methods for Infant Family Practice | Survey and critical examination of child development, parent-child relationships, family relationships, and early intervention research and the application to IFP. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 610 | Gender Development | Examines current theories and research concerning the various aspects of gender and developmental change. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 612 | Children's Peer Relationships | Studies scientific theory, research, and evidence on peer relationships and social competence from early childhood through adolescence. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: CDE 531 with C or better |
| CDE | 634 | Prevention and Child Development | Advanced training in research and theory-based approaches to developing and evaluating prevention programs for children at risk. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite: CDE 534 |
| CDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|----------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| CDE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| CDE | | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better. Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDE | | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better. Minimum Junior standing |
| CEd | 111 | Exploration of Education | Education as an instrument in the development of the individual and society, and its significance as an American institution. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| CEd | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CEd | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CEd | 250 | Career Development | Covers models of the individual, the world of work, and decision making with emphasis on individual application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | |
| CEd | 294 | Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CEd | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CEd | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| CEd | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CEd | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CEd | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| CEd | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CEd | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEd | 501 | Intro to Research and Evaluation in Counseling | Introduction to the basic models of research and evaluation in the field of counseling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CED 501 or 591 (Res. & Eval. in Counseling) |
| CEd | 502 | Counseling Research Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate counseling research problems using statistical software. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CED 502 or CED 591 (Counseling Research Data Analysis) |
| CEd | 522 | Theories of Counseling and Psychotherapy | Presents major theories of psychological intervention as well as underlying personality theory upon which they are based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CEd | 523 | Psychological Tests | Standardized tests in the study of the individual, with emphasis on test score interpretation in counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CEd | 525 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: COE 501 |
| CEd | 527 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CEd | 528 | School Counseling | Introduces counseling within multicultural settings. Emphasizes counseling, consultation, and coordination skills needed for schools' comprehensive developmental guidance programs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CEd | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEd | 534 | Occupations and Careers | The world of work, career development, education, and training for occupational entry and mobility. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CEd | 545 | Analysis of the Individual | Theory and methods commonly used in studying the individual. Observational methods, diagnostic interviews, structured, and semi-structured methods for assessing personality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CEd | 567 | Group Dynamics and Counseling | Group process factors, theory, and diversity issues determining effective interaction in small groups. Emphasis placed on lecturettes, self awareness, and experiential components. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |

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| CED | 577 | Counseling Prepracticum | Focus on racial, social, and cultural factors in the development of helping relationships through integration of cognitive and affective self-awareness with counseling skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling Psychology MC or PhD student |
| CED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 672 | Marriage and Family Counseling | Introduces marriage and family counseling theories. Emphasizes a systems-communication model utilizing cocounseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 685 | School Counseling Internship | Structured practical experience in school counseling following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Masters of Counseling major |
| CED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

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| CED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CEE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | HU | Credit is allowed for only CEE 181, FSE 181, or SOS 181 |
| CEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |
| CEE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CEE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |
| CEE | 281 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 300 | Engineering Business Practice | Engineering economic principles, cost/benefit analysis, project financing and delivery, management of engineering design, business practices, ethical and professional responsibilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | L | Pre-requisites: Engineering BSE student, Junior or Senior standing; MAT 267 with C or better |
| CEE | 312 | Engrg Materials | | N | LEC | N | CNV | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 2 | | |
| CEE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisites: BSE Construction Engineering or BSE Engineering major; CEE 212 (or MAE 212); CEE 213 with C or better. Pre/coreq: CEE 384 (or MAE 384) with C or better if completed; BS Construction Management major; Credit for only CEE 321 or CNE 321 |
| CEE | 341 | Fluid Mechanics for Civil Engineers | Fundamental principles and methods of fluid mechanics forming the analytical basis for water resources engineering. Conduit and open channel flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: BSE Civil Engineering student; CEE 212 (or CEE 211 or MAE 212) and CEE 213 with C or better; Pre/Co-requisite: CEE 384 or MAE 384 (with C or better if completed) |
| CEE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 351 |
| CEE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 353 |
| CEE | 361 | Introduction to Environmental Engineering | Concepts of air and water pollution; environmental regulation, risk assessment, chemistry, water quality modeling, water and wastewater treatment systems designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 213 with C or better; CHM 114 or CHM 116; Pre- or corequisite(s): IEE 380 |
| CEE | 372 | Transportation Engineering | Fundamental background of highway and traffic engineering in the areas of planning, design, and operations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: Civil Engineering BSE student; CEE 213 with C or better; Pre/Co-requisite: IEE 380 |
| CEE | 384 | Numerical Methods for Engineers | Numerical methods and computational tools for selected problems in engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | CS | Prerequisite(s): Fulton Engineering undergrad; MAT 274 or 275 with C or better; MAT 242 or 343 (or 342 for non-MAE student) with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if complete; Credit allowed for only MAE 384 or CEE 384 |
| CEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 400 | Earth Systems Engineering and Management | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CEE | 412 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and 353 with C or better; Credit is allowed for only CEE 412 or 511 |
| CEE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better. Credit is allowed for only CEE 420 or CNE 420 |

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| CEE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better; Credit is allowed for only CEE or CNE 421 |
| CEE | 423 | Structural Design | Analysis and design of reinforced concrete steel, masonry, and timber structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 421 with C or better; Pre/Co-requisite: CEE 420 (with C or better if completed) |
| CEE | 432 | Developing Software for Engineering Applications | Matrix and computer applications to structural engineering and structural mechanics. Stiffness and flexibility methods, finite elements, and differences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; Credit is allowed for only CEE 432 or 532 |
| CEE | 440 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models, and systems. Rain-runoff models. Hydrologic design. Concepts, properties, and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 341 or MAE 340 with C or better; Credit is allowed for only CEE 440 or CEE 545 or CEE 598 (Hydrology) |
| CEE | 441 | Water Resources Engineering | Applies the principles of hydraulics and hydrology to the engineering of water resources projects; design and operation of water resources systems; water quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 with C or better |
| CEE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better; Credit is allowed for only CEE 452 or CNE 452 |
| CEE | 462 | Unit Operations in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 with C or better |
| CEE | 466 | Urban Water System Design | Capacity, planning and design of water supply, domestic and storm drainage; and solid waste systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 and 361 with C or better |
| CEE | 467 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 or MIC 220 with C or better; Credit is allowed for only CEE 467 or 567 |
| CEE | 469 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 or CHE 334 with C or better; Credit is allowed for only CEE 469, 569, CHE 469 or 569 |
| CEE | 470 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 361. Credit is allowed for only CEE 470, 494 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 474 | Transportation Systems Planning | Transportation systems modeling procedures, travel characteristics analysis, traffic predictions, transportation systems management, and transit planning methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 and 384 with C or better |
| CEE | 475 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 with C or better; Credit is allowed for only CEE 475 or 575 |
| CEE | 481 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; CEE 351 with C or better; CEE 372 with C or better. Credit is allowed for only CEE 481 or 585 |
| CEE | 483 | Highway Materials, Construction, and Quality | Properties of highway materials, including aggregates, asphalt concrete, and portland cement concrete; construction practice; material delivery, placement, and compaction; quality control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and CEE 372 and CEE 353 with C or better. Credit is allowed for only CEE 483 or 583 |
| CEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | |
| CEE | 485 | Sustainable Civil and Environmental Systems Engineering | Provides working knowledge of operations research methodologies, both the traditional and more modern metaheuristic techniques, to evaluate sustainable civil engineering systems and quantitatively evaluate project alternatives involving single or multiple goals. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 300; MAT 242 with C or better |
| CEE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | L | Pre-requisites: Civil Engineering BSE student; CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student; CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486 |
| CEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | L | Pre-requisite: Barrett Honors Engineering student |
| CEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-7 | | |
| CEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 511 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate Civil Engineering student; Credit is allowed for only CEE 412 or 511 |
| CEE | 512 | Pavement Performance and Management | Pavement management systems, including data collection, evaluation, optimization, economic analysis, and computer applications for highway and airport design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |

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| CEE | 513 | Pavement Evaluation, Maintenance, and Rehabilitation | Provides the necessary information for pavement engineers to evaluate, identify, and select reliable and cost-effective rehabilitation alternatives for existing Hot Mix Asphalt (HMA) and Portland Cement Concrete (PCC) pavements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 514 | Bituminous Materials and Mixture | Types of bituminous materials used in pavement mixtures. Chemical composition, physical properties, desirable aggregate characteristics, optimum asphalt contents, superpave asphalt binder, mixture design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |
| CEE | 515 | Properties of Concrete | Materials science of concrete. Cement chemistry, mechanisms of hydration, interrelationships among micro- and macro-properties of cement-based materials. Mechanical properties, failure theories, fracture mechanics of concrete materials. Cement-based composite materials and the durability aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 516 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 521 | Stress Analysis | Introduces tensors; kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 522 | Experimental Stress Analysis | Specification and analysis of stress and strain at a point, stress-strain relationships. Mechanical, optical, and electrical strain gages and circuits, digital data acquisition and analysis, closed loop mechanical testing, fracture mechanics, optical methods and photoelasticity, and introduction to nondestructive testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 524 | Advanced Steel Structures | Strength properties of steel and their effects on structural behavior. Elastic design of steel structures. Plastic analysis and design of beams, frames, and bents. Plastic deflections. Plastic design requirements. Multistory buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 526 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 527 | Advanced Concrete Structures | Ultimate strength design. Combined shear and torsion. Serviceability. Plastic analysis. Special systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 530 | Prestressed Concrete | Materials and methods of prestressing. Analysis and design for flexure, shear, and torsion. Prestress losses due to friction, creep, shrinkage, and anchorage set. Statically indeterminate structures. Design of flat slabs, bridges, and composite beams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 532 | Developing Software for Engineering Applications | Fundamentals of engineering software development and object-oriented programming. Programming in C++. Development of matrix toolbox. Introduces finite element method. Computer graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 432 or 532 |
| CEE | 533 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 536 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems, exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| CEE | 540 | Groundwater Hydrology | Physical properties of aquifers, well pumping, subsurface flow modeling, unsaturated flow, numerical methods, land subsidence, and groundwater pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 541 | Surface Water Hydrology | Hydrologic cycle and mechanisms, including precipitation, evaporation, and transpiration; hydrograph analysis; flood routing; statistical methods in hydrology and hydrologic design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 543 | Water Resources Systems | Theory and application of quantitative planning methodologies for the design and operation of water resources systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 544 | Water Policy and Management | Covers water policy and management focused on Arizona. Useful to anyone looking for a general background on water issues in Arizona or considering a career in water resources and environmental engineering, planning, or public policy. Divided into three major sections: the history of water resources development and hydrology of Arizona; water management in Arizona; and an examination of current issues and controversies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | You may not enroll in CEE 544 if you have credit in SOS 551 |
| CEE | 545 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models and systems. Rain-runoff models. Hydrologic design. Concepts, properties and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 440, 545 or 598 (Hydrology) |
| CEE | 546 | Free Surface Hydraulics | Derivation of 1-D equations used in open channel flow analysis; computations for uniform and nonuniform flows, unsteady flow, and flood routing. Mathematical and physical models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 550 | Soil Behavior | Physicochemical aspects of soil behavior, stabilization of soils, and engineering properties of soils. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 551 | Advanced Geotechnical Testing | Oedometer, triaxial (static and cyclic) back pressure saturated and unsaturated samples, pore pressure measurements, closed-loop computer-controlled testing, in-situ testing, and sampling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 553 | Advanced Soil Mechanics | Applies theories of elasticity and plasticity to soils, theories of consolidation, failure theories, and response to static and dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |

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| CEE | 554 | Shear Strength and Slope Stability | Shear strength of saturated and unsaturated soils strength-deformation relationships, time-dependent strength parameters, effects of sampling, and advanced slope stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 555 | Advanced Foundations | Deep foundations, braced excavations, anchored bulkheads, reinforced earth, and underpinning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 557 | Geoenvironmental Engineering | Environmental site assessment, solid waste management, waste containment system design, soil and groundwater remediation, soil erosion control, brownfields development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 558 | Unsaturated Soil Mechanics | Advanced unsaturated soil mechanics theory, including introduction of stress-state variables and constitutive relationships for unsaturated flow and stress-strain applications. Knowledge of CEE 351 or equivalent material is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 559 | Earthquake Engineering | Characteristics of earthquake motions, selection of design earthquakes, site response analyses, seismic slope stability, and liquefaction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 560 | Soil and Groundwater Remediation | Presents techniques for remediation of contaminated soils and groundwaters with basic engineering principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 561 | Physical-Chemical Treatment of Water and Waste | Theory and design of physical and chemical processes for the treatment of water and wastewaters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 562 | Environmental Biochemistry and Waste Treatment | Theory and design of biological waste treatment systems. Pollution and environmental assimilation of wastes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 563 | Environmental Engineering Chemistry | Analyzes water, domestic and industrial wastes, lab procedures for pollution evaluation, and the control of water and waste treatment processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 564 | Contaminant Fate and Transport | Fate and transport processes with emphasis on governing equations and parameters relevant to the migration of chemicals in the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 565 | Advanced Environmental Biotechnology | Emerging topics in environmental biotechnology and related problem-solving techniques. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); CEE 562 and 567; Credit is allowed for only CEE 565 or 598 (Advanced Environmental Biotechnology) |
| CEE | 567 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 467 or 567 |
| CEE | 568 | Unit Processing in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 469, 569, CHE 469 or 569 |
| CEE | 570 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 470, 494 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 571 | Advanced Environmental Chemistry | Applied water quality and water treatment aquatic chemistry. Knowledge of environmental chemistry topics is necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD major |
| CEE | 573 | Transportation Operations | Driver, vehicle, and roadway characteristics; traffic control devices; traffic engineering studies; and transportation system management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 576 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 475 or 576 |
| CEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 581 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 581 or SOS 552 |
| CEE | 582 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 483 or 583 |
| CEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 585 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MS, MSE or PhD Civil, Environmental and Sustainable Engineering major. Credit is allowed for only CEE 481 or CEE 585 |
| CEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |

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| CEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | IND | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Prerequisite(s): Civil Engineering PhD student |
| CEN | 501 | Computer Systems I | Introduces digital CMOS circuit and logic design and signal processing and analysis. Design of digital CMOS logic gates, combinational and sequential logic circuits, arithmetic logic unit, register-transfer-level design; Fourier and z transforms, filters, sampling, random variables, distribution and density functions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Engineering Graduate student; Credit is allowed for only CEN 501 or 591 (Computer Systems I) |
| CEN | 502 | Computer Systems II | Covers fundamentals of computer architecture and focuses on basic principles of systems programming, operating systems, compilers and networking topics that cover the computer science to computer engineering interface. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering Graduate student; Credit is allowed for only CEN 502 or 591 (Computer Systems II) |
| CEN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CEN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHE | 100 | Introduction to Chemical Engineering | Introduces design in chemical engineering, learning, chemical engineering profession, computer models, communication skills, quality and customer satisfaction. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 2 | | Pre-requisite: Ira A. Fulton School of Engineering and University College student |
| CHE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 211 | Introduction to Chemical Processing | Applies chemical engineering analysis and problem solving to chemical processes material and energy balance methods and skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): CHM 116 with C or better; MAT 266 or 271 with C or better |
| CHE | 231 | Introduction to Transport Phenomena I: Fluids | Transport phenomena, with emphasis on fluid systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s) with C or better: CHE 211; MAT 266 or 271; PHY 121. Corequisite(s): MAT 274 or 275; Credit is allowed for only CHE 231 or 501 |
| CHE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHE | 334 | Introduction to Transport Phenomena II: Heat and Mass Transfer | Applies heat and mass transport principles. Design of heat exchangers and continuous contactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Chemical Engineering BSE major; CHE 231 with C or better |
| CHE | 342 | Introduction to Applied Chemical Thermodynamics | Applies conservation and accounting principles with nonideal property estimation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Biomedical Engineering BSE major with BME 200 with C or better OR Chemical Engineering BSE major with CHE 211 with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if completed |
| CHE | 352 | Chemical Engineering Lab I | Introduces engineering lab equipment, data collection, and analysis; strengthens ability to generate written reports and oral presentations; reinforces teamwork skills; strengthens and extends the understanding of earlier technical contents in the curriculum. | N | LAB | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 |
| CHE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 432 | Principles of Chemical Engineering Design | Multicomponent distillation, engineering economics, equipment sizing and costs, plant operation economics, and simulation and optimization techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334, 342, 442, and 433 with C or better |
| CHE | 433 | Modern Separations | Design of modern separation equipment in chemical engineering other than fractionation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better |
| CHE | 442 | Introduction to Chemical Reactor Design | Applies kinetics to chemical reactor design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better; Credit is allowed for only CHE 442 or CHE 505 |
| CHE | 451 | Chemical Engineering Laboratory II | Operation, control, and design of experimental and industrial process equipment; independent research projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 334 and 342 with C or better |
| CHE | 458 | Semiconductor Material Processing | Introduces the processing and characterization of electronic materials for semiconductor applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering BSE student; CHE 334 and CHE 342 with C or better OR Graduate Engineering student |
| CHE | 461 | Process Dynamic Control | Process dynamics, instrumentation, and feedback applied to automatic process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 211 with C or better |
| CHE | 462 | Process Design | Applies economic principles to optimize equipment selection and design; development and design of process systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; CHE 432, 433, and 442 with C or better |

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| CHE | 469 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Credit is allowed for only CEE 469, 569, CHE 469 or 569 |
| CHE | 475 | Biochemical Engineering | Applies chemical engineering methods, mass transfer, thermodynamics, and transport phenomena to industrial biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisite: CHE 334 and 442 |
| CHE | 476 | Bioreaction Engineering | Principles of analysis and design of reactors for processing with cells and other biologically active materials; applies reaction engineering in biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering BS or BSE student OR Graduate Engineering student |
| CHE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | |
| CHE | 490 | Chemical Engineering Projects | Individual projects in chemical engineering operations and design. | N | RSC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-5 | | Pre-requisite: Engineering BSE student |
| CHE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 496 | Professional Seminar | Professional and ethical aspects with a discussion of responsibilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-7 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 501 | Introduction to Transport Phenomena I: Fluids | Transport phenomena, with emphasis on fluid systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only CHE 231 or 501 |
| CHE | 502 | Introduction to Transport Phenomena II: Heat and Mass Transfer | Applies heat and mass transport principles. Design of heat exchangers and continuous contactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only CHE 334 or 502 |
| CHE | 504 | Introduction to Applied Chemical Thermodynamics | Applies conservation and accounting principles with nonideal property estimation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Credit is allowed for only CHE 342 or 504 |
| CHE | 505 | Introduction to Chemical Reactor Design | Applies kinetics to chemical reactor design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHE 442 or 505 |
| CHE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MSE 518, EEE 518, MAE 518, MSE 475, or CHE 518 |
| CHE | 527 | Advanced Applied Mathematical Analysis in Chemical Engineering | Formulation and solution of complex mathematical relationships resulting from the description of physical problems in mass, energy, and momentum transfer and chemical kinetics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHE | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| CHE | 543 | Thermodynamics of Chemical Systems | Classical and statistical thermodynamics of nonideal physicochemical systems and processes; prediction of optimum operating conditions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| CHE | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 561 | Advanced Process Control | Dynamic process representation, linear optimal control, optimal state reconstruction, and parameter and state estimation techniques for continuous and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CEE 469, 569, CHE 469 or 569 |
| CHE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): graduate CHE major |
| CHE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |

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| CHE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student |
| CHE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHI | 101 | First-Year Chinese I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| CHI | 102 | First-Year Chinese II | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: CHI 101 |
| CHI | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre/Co-requisites: ENG 101, 105, or 107; Credit is allowed for only SLC 120 or CHI 120 |
| CHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| CHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 201 | Second-Year Chinese I | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 102 |
| CHI | 202 | Second-Year Chinese II | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: CHI 201 |
| CHI | 205 | Chinese Calligraphy | Introduces styles and techniques of Chinese writing. Requires no knowledge of Chinese or Japanese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| CHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 301 | Third-Year Chinese I | Expansion of proficiency in listening comprehension, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 202 with C or better |
| CHI | 302 | Third-Year Chinese II | Continuation of CHI 301. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 301 with C or better |
| CHI | 307 | Introduction to Literary Chinese I | Reading in various genres of pre-20th century literature (wen-yen), with analysis of the structure of the classical writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 302, JPN 202, or KOR 202 with C or better |
| CHI | 308 | Introduction to Literary Chinese II | Continuation of CHI 307. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 307 with C or better |
| CHI | 309 | Chinese Conversation | Aural/oral drills using contemporary stories, articles, and essays. For students with lower-level proficiency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 2 | | Pre-requisite: CHI 202 |
| CHI | 310 | Chinese Conversation | See CHI 309. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 2 | | Pre-requisite: CHI 202 |
| CHI | 311 | Chinese Conversation | Intensive aural/oral practice in modern Chinese. For students who have lived in China or a Chinese-speaking environment. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 2 | | Pre-requisites: CHI 202 |
| CHI | 312 | Chinese Conversation | See CHI 311. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 2 | | Pre-requisites: CHI 202 |

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| CHI | 321 | Chinese Literature | Masterworks of the tradition from the 7th century BCE through the 13th century. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| CHI | 322 | Chinese Literature | Masterpieces from the later tradition and its transition to modern times. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| CHI | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| CHI | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| CHI | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| CHI | 338 | The Daoist Bible: The Dao de jing | At 5,000 words, the Dao de jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| CHI | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; 24 or more hours; Credit is allowed for only CHI or REL 343 |
| CHI | 345 | Chinese Film and Civilization | Screening and discussion of recent films from China, Taiwan, and Hong Kong in the context of modern Chinese civilization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| CHI | 380 | The Chinese Language | Introduces the Chinese languages from linguistic perspectives. Topics include the linguistic structure and characteristics (phonetics, phonology, morphology and syntax) of the Chinese language; linguistic history and dialects of Chinese; and its relationship with culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| CHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 401 | Fourth-Year Chinese I | Focuses on solidifying and improving students' knowledge of modern Mandarin. Emphasizes learning strategies to increase reading and listening comprehension, as well as further strengthening oral fluency and written skills. Surveys a wide variety of original text and media materials, in both full-form and simplified characters. Conducted in Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 302 with C or better |
| CHI | 402 | Fourth-Year Chinese II | Continuation of CHI 401. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 401 with C or better |
| CHI | 407 | Chinese for Academic and Professional Purposes I | Part of the Chinese Flagship program; course has a three-fold objective: (1) to improve language proficiency in all four language skills; (2) to support other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; and (3) to develop the use of explicit language learning strategies that support professional-level literacy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 402 with C or better |
| CHI | 408 | Chinese for Academic and Professional Purposes II | Part of the Chinese Flagship Program. Improves language proficiency in all four language skills; supports other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; develops the use of explicit language learning strategies that supports professional level literacy. All course work in Mandarin Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 407 with C or better |
| CHI | 430 | Readings in Chinese Religions | Readings in Chinese religious texts, including Buddhism, Daoism, local religious cults, and others. May be repeated once for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 (CHI 414) with C or better |
| CHI | 450 | Classical Prose | Readings in classical prose forms, including guwen, sanwen, pianwen, fu, and incidental writings. Course content varies with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 with C or better |
| CHI | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| CHI | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| CHI | 461 | Classical Vernacular Performance Literature | Readings in performance literature in colloquial Chinese. Bianwen, zhugongdiao, baojuan, zaju, chuang drama. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 307 with C or better |
| CHI | 462 | Readings in Traditional Xiaoshuo | Readings in the shorter and longer fiction of the late imperial period written in classical vernacular language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 470 | Modern Chinese Literature and Culture | Readings in modern Chinese literary texts, including prose, fiction, and poetry. Course content changes with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: CHI 302 with C or better |
| CHI | 482 | History of the Chinese Language | Introduces the history of the Chinese language. Graduate/advanced undergraduate-level introductory course on the historical changes of the sounds, writing system, grammar, and other aspects of the Chinese language. Topics include the historical phonology of Chinese, development of graphs (Hanzi), some topics of syntactic changes in texts, morphology, lexicography, cultural implication of language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| CHI | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 509 | Methods of Research in Chinese Applied Linguistics | Offers an overview of issues in applied linguistics, specifically related to the teaching and learning of Chinese as a second language. Divided according to broad topics and may vary depending on interests and background of class participants. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed only for CHI 509 or 591 (Chinese Applied Linguistics) |
| CHI | 514 | Advanced Classical Chinese | Close readings in selected premodern texts, with focus on special grammatical features, and increased vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 520 | Teaching of Chinese as a Second Language | Theory and practice of teaching Chinese, including presentation, interaction, and evaluation, with consideration given to cultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 535 | Advanced Readings | Readings in primary and secondary sources in history, art, religious studies, economics, or other fields. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 543 | Chinese Language and Linguistics | Analysis and discussion, within the framework of linguistic theory, of selected problems in Chinese phonetics, morphology, and syntax. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 561 | Readings in Traditional Xiaoshuo | Introduces major issues, texts, and resource materials for the study of narrative forms, including short stories and longer works of fiction. Focuses on the period from 1400 to 1900. One year of university-level classical Chinese or equivalent proficiency; three years of university-level modern Chinese recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 585 | Problems of Translation | Theories and practice of translation: strategies for handling a variety of Chinese texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| CHI | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | SQ | |
| CHM | 107 | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | SQ | |
| CHM | 108 | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | SQ | Pre/Co-requisite: CHM 107 |
| CHM | 111 | General Chemistry Laboratory for Majors I | Laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 117 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | SQ | Pre- or corequisite(s): CHM 117 with C or better if completed; Biochemistry, Biophysics or Chemistry major |

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| CHM | 112 | General Chemistry Laboratory for Majors II | Continuation of CHM 111 laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 118 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | SQ | Prerequisite(s): CHM 111 with C or better; Biochemistry, Biophysics or Chemistry major. Pre- or corequisite(s): CHM 118 with C or better if completed |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed; Credit is allowed for only CHM 113 or 117 |
| CHM | 114 | General Chemistry for Engineers | Chemical principles with emphasis toward engineering. Students without high school chemistry or are chemical engineering majors must enroll in the CHM 113, 116 sequence instead of CHM 114. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | SQ | Pre-requisites: CHM 113 or CHM 117, or CHM 114 with C or better. Credit is allowed for only CHM 115, 116 or 118 |
| CHM | 117 | General Chemistry for Majors I | Lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the CHM 111 laboratory course. Covers electronic structure of atoms and molecules, intermolecular forces, bonding models, molecular geometry, physical states of matter, gas laws, and chemistry of condensed matter and modern materials. Highlights chemical reactivity, periodic trends and descriptive chemistry. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | SQ | Prereq(s): Biochem, Biophys or Chem major; Math Placement Test score of 80% and Adv Placement Test of 38% or higher (or ALEKS score of 67% or higher) OR pre- or coreq(s): MAT 265 (or 270) with C or better if completed. Credit for only CHM 113 or 117 |
| CHM | 118 | General Chemistry for Majors II | Continuation of CHM 117 lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the major's CHM 112 laboratory course. Topics include thermodynamics, properties of solutions, chemical equilibrium, aqueous chemistry, acids and bases, electrochemistry, chemical kinetics, nuclear chemistry, coordination chemistry. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | SQ | Prerequisite(s) with C or better: CHM 117; MAT 270; Biochemistry, Biophysics or Chemistry major. Pre- or corequisite(s): MAT 271 with C or better if completed. Credit is allowed for only CHM 116 or CHM 118 |
| CHM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | Pre-requisites: Biochemistry or Chemistry major; Maximum 45 hours |
| CHM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | SQ | Pre-requisites: CHM 101, 114, 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | SQ | Pre/Co-requisites: CHM 231 with C or better |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 240 | Mathematical Methods in Chemistry | Introduces mathematical/computational methods in chemical kinetics, thermodynamics, quantum chemistry. Mathematical-based computer lab. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | CS | Pre-requisite: CHM 116 (or 118) with C or better; Pre/Co-requisites: MAT 272 or MAT 267 with C or better if completed |
| CHM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| CHM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 302 | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |
| CHM | 303 | Environmental Chemistry Laboratory | Lab in environmental chemistry to complement CHM 302. First-hand experience with sampling methods, analytical techniques, and environmental lab methods. Both CHM 303 and CHM 348 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 2 | L | Pre/Co-requisites: CHM 302 with C or better if completed |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |

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| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 327 | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | 328 | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | 333 | Organic Chemistry for Majors I | Structures, reaction mechanisms and kinetics, and systematic syntheses of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 334 | Organic Chemistry for Majors II | Continuation of CHM 333. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 333 with C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 337 | Organic Chemistry Laboratory for Majors I | Emphasizes mechanisms, kinetics, and products of organic reactions. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre-requisites: Biochemistry or Chemistry major; Pre/Co-requisite: CHM 333 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 338 | Organic Chemistry Laboratory for Majors II | Continuation of CHM 337. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre-requisites: Biochemistry or Chemistry major; CHM 337 with C or better; Pre/Co-requisites: CHM 334; Credit is allowed for only CHM 238 or 338 |
| CHM | 341 | Elementary Physical Chemistry | Thermodynamics, equilibrium, states of matter, solutions, and chemical kinetics. For students in premedical, biological, and educational curricula. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 114, 116 or 118 with C or better; CHM 231, 233 or 333 with C or better; MAT 210, 251, 265 or 270 with C or better; PHY 101, 112 or 131 with C or better. |
| CHM | 343 | Elementary Physical Chemistry Laboratory | Physical chemistry experiments. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Pre/Co-requisite: CHM 341 with C or better if completed; Credit is allowed for only CHM 343 or 348 and 349 |
| CHM | 345 | Physical Chemistry I | Introduces quantum chemistry with application to electronic structure and dynamics of atoms and molecules. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s) with C or better: CHM 116 (or CHM 118); CHM 240 (OR both MAT 274 (or MAT 275) and MAT 242 (or MAT 342 or 343) (OR PHY 201); MAT 267 (or MAT 272); PHY 131 (or PHY 151) |
| CHM | 346 | Physical Chemistry II | Introduces equilibrium and statistical thermodynamics. Laws of thermodynamics, equations of state, multicomponent chemical and phase equilibria, and electrochemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 345 with C or better |
| CHM | 348 | Physical Chemistry Laboratory I | Lab experiments in spectroscopy and computational chemistry. To secure L General Studies credit the following must be taken: CHM 303 & CHM 348 or CHM 348 & CHM 349 & CHM 452. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | L | Pre/Co-requisite: CHM 345 with C or better if completed |
| CHM | 349 | Physical Chemistry Laboratory II | Lab experiments in thermodynamics, electrochemistry, and computational chemistry. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | L | Pre/Co-requisites: CHM 346 with C or better if completed |
| CHM | 385 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| CHM | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | |
| CHM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| CHM | 424 | Separation Science | Basic theory and practical aspects of gas, liquid, ion-exchange, and gel-permeation chromatographies, and other important industrial and research techniques. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 234, or 334, or 346, with C or better |
| CHM | 433 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 234 or 334 with C or better; CHM 341 or 346 with C or better; Credit is allowed for only CHM 433 or 531 |
| CHM | 434 | Advanced Organic Chemistry II | Continuation of CHM 433. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 433 or CHM 531 with C or better |
| CHM | 435 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: (BCH 361 or BCH 461) and BIO 353 with C or better; CHM 234 (or CHM 334) with C or better; Credit is allowed for only CHM 435 or 535 |
| CHM | 452 | Inorganic Chemistry Laboratory | Preparation and characterization of typical inorganic substances, emphasizing methods and techniques. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-2 | L | Pre/Co-requisite: CHM 453 with C or better if completed |
| CHM | 453 | Inorganic Chemistry | Principles and applications of inorganic chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 341 or CHM 346 with C or better |
| CHM | 460 | Biological Chemistry | Structure and function of macromolecules and their involvement in the processing of energy and information by living cells. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 234 (or 334) with C or better; CHM 346 with C or better |
| CHM | 471 | Solid-State Chemistry | Crystal chemistry, thermodynamics and electrochemistry of solids, nonstoichiometric compounds, diffusion and solid-state reactions, crystal growth, and selected topics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre/Co-requisite: CHM 346 with C or better if completed; Credit is allowed for only CHM 471 or 571 |
| CHM | 480 | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | |
| CHM | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| CHM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | |
| CHM | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better; Credit is allowed for only GLG 485 or CHM 485 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHM | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: CHM 302, GLG 321 or GLG 481 with C or better; Credit is allowed for only CHM 489, GLG 489 or 490 (Field Geochemistry) |
| CHM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | |
| CHM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-7 | L | |
| CHM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-3 | | |
| CHM | 501 | Current Topics in Chemistry | | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: Graduate students (degree and non-degree); Credit is allowed for only BCH 520 or CHM 520 |
| CHM | 523 | Advanced Analytical Chemistry | Theoretical principles of analytical instrumentation and measurements. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 524 | Separation Science | Addresses principles and applications for all areas of chemical separations. Emphasizes separations principles in microfluidics and its interface with nanotechnology and traditional electronic materials. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 525 | Analytical Spectroscopy | Theoretical and practical considerations involving the use of optical instruments for chemical analyses. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 527 | Advanced Electrochemistry | Theoretical and practical considerations for modern electrochemistry, including voltammetry, potentiometry and microelectrode analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only CHM 527 or NAN 527 |
| CHM | 531 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, molecular orbital theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only CHM 433 or CHM 531 |
| CHM | 532 | Advanced Organic Chemistry II | Organic mechanisms, thermodynamic and kinetic control, structure/activity relationships, isotope effects, multistep reactions, reactive intermediates, radical reactions, electron transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 535 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: Graduate degree or non-degree seeking students; Credit is allowed for only CHM 435 or 535 |
| CHM | 537 | Organic Reactions | Organic synthetic methodologies and important synthetic reactions emphasizing recently discovered reactions of preparative value. Protection/deprotection synthetic strategies; peptide synthesis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| CHM | 541 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 541 or MSE 524 |
| CHM | 543 | Computational Chemistry | Provides basic concepts and practical experience in computational chemistry as applied to molecules and solids. Systematically covers theoretical background and applied aspects of electronic structure methods/simulation, and related visualization techniques. Provides weekly laboratory session will provide hands-on experience with state-of-the-art molecular and solid-state simulation/visualization packages, with an emphasis on their reliability, predictive capability and practical limitations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Pre/Co-requisite: CHM 545 |

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| CHM | 544 | Introduction to Nanoscience | Survey of nanoscience; quantum statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nanobiology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| CHM | 545 | Quantum Chemistry | Wave and matrix formulation of quantum mechanics applied to the vibrational, rotational, and electronic states of polyatomic molecules. Hartree-Fock, electron correlation, and molecular orbital theory. Selection rules and introduction to group theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 546 | Molecular Spectroscopy and Group Theory | Applies quantum mechanics to the general problem of the interaction of light with molecular systems. Angular momentum and group theory. Symmetry classifications. Overview of the formalism and experimental techniques in different resonant-based spectroscopies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 548 | Chemical Kinetics and Dynamics | Experimental and theoretical aspects of time-dependent processes in chemistry. Topics include kinetics of chemical reactions, diffusion, and relaxation phenomena in ordered and disordered materials. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 549 | Advanced Topics in Physical Chemistry | Various advanced and special topics in physical chemistry. Previous topics included: supercooled liquids and the glass transition, vibrational spectroscopy of solids, phase transitions and critical phenomena. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 553 | Advanced Inorganic Chemistry | Principles of modern inorganic chemistry applied over the entire periodic system. Bonding theory, chemical reactivity, spectroscopic and magnetic properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 571 | Structure, Bonding, and Symmetry in Materials | Principles of structural and materials chemistry, emphasizing crystal chemistry. Symmetry of periodic structures (space groups), factors determining bond lengths and coordination geometries, and the role of structure in determining physical properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 471 or 571 |
| CHM | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only CHM 581 or PHS 581 |
| CHM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Chemistry and Biochemistry | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| CHM | | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| CHM | | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | |
| CHM | | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | |
| CHM | | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed; Credit is allowed for only CHM 113 or 117 |
| CHM | | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed; Credit is allowed for only CHM 113 or 117 |
| CHM | | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Pre-requisites: CHM 113 or CHM 117, or CHM 114 with C or better. Credit is allowed for only CHM 115, 116 or 118 |
| CHM | | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Pre-requisites: CHM 113 or CHM 117, or CHM 114 with C or better. Credit is allowed for only CHM 115, 116 or 118 |
| CHM | | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: CHM 101, 114, 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisites: CHM 231 with C or better |
| CHM | | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |
| CHM | | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHM | | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| CHM | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| CHM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| CHP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | REC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHP | 501 | Community Health Assessment and Analysis | Provides theory and practice in community assessment and analysis applicable to community health practice. | N | REC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing (Comm Health Nursing) or Nursing (Comm Health Adv Prac) student; CHP 500 with B or better; Co-requisite: NUR 581 |
| CHP | 502 | Community Health Program Planning and Evaluation | Utilizes planning and evaluation theory in planning programs to meet identified health needs of communities. | N | REC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing (Comm Health Adv Prac) student; CHP 501 with B or better |
| CHP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty; courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIM | 105 | Introduction to the Concrete Industry | Overview of the history, career opportunities, job functions, and professional organizations in the concrete industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CIM | 106 | Fundamentals of Concrete: Properties and Testing | Examines effects of concrete-making materials on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisite: CIM 105 with C or better; Co-requisite: STP 226 |
| CIM | 205 | Concrete Construction Methods | Forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing, and curing concrete for foundations and other structural members. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 106 with C or better; CON 252 |
| CIM | 206 | Application of Concrete in Construction | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 205 with C or better; CON 243 with C or better |
| CIM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 305 | Management of Concrete Products: Ordering and Delivering | Basic understanding of managing the order and delivery process common to all concrete products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better; CON 221 with C or better |
| CIM | 306 | Management of Concrete Products: Production Facilities | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 305 and CON 251 with C or better; CON 271 |
| CIM | 405 | Concrete Problems: Diagnosis, Prevention, and Dispute | Diagnose and prevent problems related to concrete production, testing, construction, and performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better |
| CIM | 406 | Concrete Industry Management Capstone | Intensive study of a problem appropriate to the major and the student's career interests. Lecture, student presentations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisites: Construction BS student; CIM 405 with C or better; COM 225 |
| CIM | 420 | Senior Concrete Lab | Reintroduces fundamental lab procedures as well as advanced testing methods. Collect data, search for literature, analyze and report on conclusions. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 405 with C or better |
| CIM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CIS | 105 | Computer Applications and Information Technology | Introduces business information systems from a business intelligence perspective and the uses of application software with emphasis on database and spreadsheet packages for efficient and effective problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | |

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| CIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-3 | | |
| CIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | |
| CIS | 220 | Programming Concepts for Accountancy Majors | Introduces business computer programming. Uses programming languages such as Visual BASIC to teach proper programming style and practice. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | |
| CIS | 235 | Introduction to Information Systems | Survey course introducing the competitive and strategic uses of information systems, how information systems are transforming organizations and their management, and the issues, difficulties, and opportunities facing the technology professional and business manager today. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: CIS 105, 200 or 220 with C or better; MAT 210, 270, 211 or 271 with C or better; Credit allowed for only CIS 235 or CIS 236 |
| CIS | 236 | Honors Introduction to Information Systems | Introduces strategic leveraging of IS solutions and surveys different facets of IS in order to gain an understanding of how business problems are addressed and opportunities realized. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | Prerequisite(s): Barrett Honors student |
| CIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Accountancy or Computer Information Systems BS or PRE student |
| CIS | 300 | Web Design and Development | Focuses on Web site development, including target audience, image presentation, page/content topic organization, site navigational functionality, implementation needs, and future needs. Web site design and development practice using business software products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: Minimum 2.0 ASU cumulative GPA AND minimum 56 earned hours, OR be post-bacc undergraduate, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| CIS | 308 | Advanced Excel in Business | Covers advanced Excel skills using an applied focus on different types of decisions one may analyze using spreadsheet capabilities; graphs and charts to communicate complex analytics; pivot tables to slice and dice data for reporting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or CIS 236 with C or better; minimum 45 hours. credit is allowed for only CIS 308 or CIS 394 (Advanced Excel in Business) |
| CIS | 309 | Business Process Management | Flow charting, swimlane diagramming, process simulation using modern tool suites. Teaches the types of process evaluation decision analytics most commonly used and covers applied process analysis in a variety of contexts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. credit is allowed for only CIS 309 or CIS 394 (Process Management) |
| CIS | 311 | Business Project Management | Overview of project management emphasizing the fundamentals and analytics that can support project decision making. Covers project planning, resource and disruption management and problem resolution skills. Leverages widely available project management computer tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 311 or CIS 394 (Project Management - Information Systems) |
| CIS | 315 | Introduction to Business Data Analytics | Overview of analytics in the business context; concepts of strategic and operational analytics; overview of concepts like dimensional modeling, the Model Lifecycle, data mining, big data, KPIs and metrics, ERP and analytics, in-database/memory analytics, real-time analytics and data stream analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) with C or better: CIS 235 (or CIS 236); ECN 221; MAT 211; BS Business Data Analytics major |
| CIS | 340 | Business Information System Development I | Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to plan and analyze the needs of modern business information system development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey CIS BS student; ACC 241, 242 or 271 with C or better; CIS 235 or 236 with C or better; ECN 221 with C or better; MAT 211 with C or better. |
| CIS | 345 | Business Information System Development II | Provides a clear understanding of the Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to design, implement, and support modern business information systems development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Computer Information Systems BS student; CIS 340 with C or better |
| CIS | 355 | Business Data Warehouses and Dimensional Modeling | SQL, stored procedures and data warehouse architectures; data warehouse requirements definition, design and analysis; overview of the steps in building information-enabled business models; role of data warehousing in data mining and analytics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): BS Business Data Analytics major. Corequisite(s): CIS 315 |
| CIS | 360 | Business Database Concepts | Database theory, design, and application, including the entity-relationship model; the relational, hierarchical, and network database models; and query languages. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Accountancy BS student and CIS 105 or 236; ACC 231, 232 or 261; ACC 241, 242 or 271 with C or better |
| CIS | 365 | Business Database Systems Development | Focuses on business database and data warehousing systems, development and management. Topics include capturing business requirements using data modeling, SQL, data security, operational and analytical data stores and data integrity. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): Computer Information Systems BS major; CIS 235 or 236 with C or better |
| CIS | 375 | Business Data Mining | Building predictive analytics (e.g., SEMMA, KDD); exposure to logistic regression, machine learning and decision tree methods; Understanding lift factors, ROC curves; hands-on use of mining software; business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: Minimum 2.0 ASU cum GPA and minimum 56 earned hours, OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| CIS | 405 | Business Intelligence | Business intelligence (BI) is a term describing a broad category of applications, technologies, architectures and processes for gathering, storing, accessing and analyzing data to provide business users with timely information to enable better insights into project and process management and evidence-based decision making. BI is based on techniques for data decision capture, cleansing, validation, warehousing and analytics to help decision makers improve decision outcomes. Provides a capstone understanding of the concepts of managing data resources and the development of business intelligence capabilities using data visualization, data warehousing, data mining, online analytical processing decision support systems and other advanced BI topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 394 (Business Intelligence) or 405 |

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| CIS | 415 | Big Data Analytics and Visualization in Business | Text and stream mining, visualizations for big data, Hadoop, cloud-based solutions, fundamentals of big data programming, social media and big data, NoSQL, software tool support for visualizations, GIS, business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisites(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 425 | Electronic Commerce Strategy | Key business strategies and technology elements of contemporary electronic commerce. Covers Web design and interactions between Web pages and databases. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W.P. Carey Accountancy BS or Computer Information Systems BS student, CIS 360 or 365 with C or better |
| CIS | 430 | Networks and Distributed Systems | Advanced topics such as communications protocols, distributed systems, network security and client-server systems; applications based on platforms such as NET and networked UNIX. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W.P. Carey Computer Information Systems student, ACC 330 or 444; CIS 340 or 410 with C or better; Pre/Co-requisite: CIS 360 or 365 |
| CIS | 440 | Systems Design and Electronic Commerce | Systems design for organizational and electronic commerce systems; use of project management and systems analysis and design tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | L | Pre-requisites: W.P. Carey Computer Information Systems BS student, CIS 360 or 365 with C or better; CIS 430 with C or better |
| CIS | 450 | Enterprise Analytics | Model lifecycle analysis, analytics governance, aligning governance, aligning firm and analytics strategy, big data security issues, enterprise search, applied projects. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisites(s) with C or better: CIS 355, 375, 415; BS Business Data Analytics major |
| CIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey CIS BS student |
| CIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |
| CIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: W.P. Carey ACC BS or CIS BS student |
| CIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |
| CIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-7 | L | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-3 | | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 502 | Information Systems | Organizational, strategic, and technical issues of the management of information. Evaluation, design, and use information systems as competitive advantage. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: W.P. Carey MBA student |
| CIS | 505 | Introduction to Enterprise Analytics | Ensuring the foundational understanding of contextualized analytics within the business enterprise continuum by covering how data flows and is managed across the landscape of enterprise business processes. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey Graduate student |
| CIS | 506 | Business Database Systems | Hierarchical, network, relational, and other recent data models for database systems. Processing issues such as concurrency control, query optimization, and distributed processing. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 508 | Data Mining I | Charting a roadmap for data-driven decision making and getting a practical understanding of how IT tools and techniques can allow managers to extract predictive analytics and patterns from primarily numeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey Graduate student |
| CIS | 509 | Data Mining II | Uses tools and techniques to analyze unstructured data that are applied to business problems to support informed decision making and the extraction of predictive analytics and patterns from primarily nonnumeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-req for CIS 509 |
| CIS | 512 | Intelligent Decision Systems and Knowledge Management | Definition, description, construction, and evaluation of computer-based decision systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 515 | Business Analytics Strategy | Evaluating, strategically aligning, planning for and directing investments in and governance of processes for continuous renewal of analytics deployments in business. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey graduate major |
| CIS | 535 | Distributed and Mixed-Media Information Systems | Modern communications protocols for wireless and mobile computing, overview of network and distributed database management systems, overview of storage and multimedia delivery issues, and shared virtual reality technologies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |

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| CIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey Info Systems PhD student |
| CIS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CMN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 502 | Theory and Practice in Communication and Persuasion | Theoretical exploration of communicative and persuasive practices as applied in various contexts. Surveys classical, modern, and contemporary theories of persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 505 | Methods in Applied Communication Research | Examines the intellectual, practical, and ethical dimensions of engaging in applied research. Emphasizes empirical and quantitative methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 506 | Humanistic Inquiry and Field Research in Communication | Examines interpretive, critical, and rhetorical approaches to communication and advocacy, including hermeneutics, ethnography, and cultural studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 515 | Ethical Issues in Communication Advocacy | Examines the ethical issues or concerns related to communication advocacy. Variable topics; examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 516 | Mediation and Dispute Resolution | Examines advocacy's role in fair negotiation and effective and successful dispute resolution. Examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 520 | Communication Campaigns | Explores public communication strategies aimed at advocating for general or specific audiences and/or for particular issues and causes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 522 | Argumentation and Advocacy | Introduces various models of argumentation and their applications to various spheres of advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts students |
| CMN | 531 | Communication and Social Change | Examines human communication and technologies of communication as agents of social change within groups, communities, organizations, and/or cultures. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CMN | 532 | Advocacy in Interpersonal Settings | Examines particular relational contexts in which advocacy plays a pronounced role (e.g., personal, family, and service provider relationships). | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 550 | Advocacy in Organizational Settings | Examines issues of upward influence, the expression of dissent, and grievance systems within organizational contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 551 | Democracy and Power in Organizations | Examines structural, historical, relational, and symbolic dimensions of organizational communication and discourses that foster or impede communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 557 | Communication and Technology | Assesses technology's role in the social dynamics of human interaction. Emphasizes the impact of technology with regard to communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 565 | Globalization and Advocacy | Explores the forces leading to increased intergroup contact and their impact on social, economic, and political dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 570 | Communication and Advocacy in Social Context | Variable topics course exploring the intersection of communication and advocacy in specific contexts not addressed in other elective courses. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |
| CNE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |
| CNE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CNE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |
| CNE | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CNE | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |
| CNE | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; Credit is allowed for only CON 271 or CNE 271 |
| CNE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CNE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisites: BSE Construction Engineering or BSE Engineering major; CEE 212 (or MAE 212); CEE 213 with C or better. Pre/coreq: CEE 384 (or MAE 384) with C or better if completed; BS Construction Management major; Credit for only CEE 321 or CNE 321 |
| CNE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 351 |

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| CNE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 353 |
| CNE | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction BS major: CON 243 and 252 OR Construction Engineering BSE major: CON 243; Credit is allowed for only CON 383 or CNE 383 |
| CNE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 400 | Earth Systems Engr & Mgmt | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CNE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better. Credit is allowed for only CEE 420 or CNE 420 |
| CNE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better; Credit is allowed for only CEE or CNE 421 |
| CNE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better; Credit is allowed for only CEE 452 or CNE 452 |
| CNE | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major: CON 271 or CNE 271 and CON 383 or CNE 383 with C or better; Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CNE | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 453 or CNE 453 with C or better; Pre- or corequisite(s): CON 495 or CNE 495 with C or better if completed; Credit is allowed for only CON 455 or CNE 455 |
| CNE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CNE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | L | Pre-requisites: Civil Engineering BSE student: CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student: CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486 |
| CNE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction BS major with CON 383 or CNE 383 with C or better and CON 389 with C or better OR Construction Engineering BSE major; Credit is allowed for only CON 495 or CNE 495 |
| CNE | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction BS major with CON 453 or CNE 453 with C or better OR Construction Engineering BSE major with COM 225 with C or better and CON 453 or CNE 453 with C or better; Credit is allowed for only CON 496 or CNE 496 |
| COE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| COE | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |

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| COE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 110 | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 124 | Media and Culture | Introduces contemporary intercultural issues as expressed through various media in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | C | |
| COM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Maximum 24 earned hours |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 241 | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Non-Communication student; Minimum 2.50 GPA |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 281 | Communication Activities | Nongraded participation in forensics or interpretation occurrictular activities. Maximum 3 semester hours each semester. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | |
| COM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 300 | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |
| COM | 301 | Introductory Theories and Principles of Communication: Communication in Relationships, Organizations | Integrated introduction to the theories and principles of communication in public, interpersonal, and organizational contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3-9 | | |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 309 | Rhetorical, Interpretive, and Critical Methods in Communication | Examines humanistic and qualitative approaches to communication. Introduces textual, interactional and ethnographic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better; Minimum GPA of 2.0 |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |

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| COM | 314 | Inner-City Families: The Cycle of Poverty | Examines issues and concerns that confront inner-city families. Blends theory and application. From a theoretical perspective, examines issues that affect families who live in the inner city (e.g., race and poverty), as well as specific skills and programmatic elements that are needed to work with families in an urban setting. In terms of application, provides an intensive service-learning-based experience. Engages students in specific service to an embedded inner-city organization for a minimum of 3 hours per week. Students work with the professor to determine appropriate service placements. | N | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 OR Junior standing; Credit is allowed for only COM 314 or 498 (Inner City Family) |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 319 | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | 320 | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 323 | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 324 | Rhetoric and Media Criticism | Critical examination of media arts, including cinema, television, and video. Applies rhetorical, textual, and interpretive methods of criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 325 | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |
| COM | 326 | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | |
| COM | 327 | Civil Communication | Offers a theoretical understanding of civil communication and methods for applying civil communication practices in a variety of contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA; junior standing |
| COM | 341 | Social Contexts for Performance | Adaptation and performance of literature for the community outside the university. Research into the practical uses of performed literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 342 | Oral History and Storytelling | Examines the formation of culture and history through research, presentations, the collection of oral history, and the telling of stories. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: ENG 101 or 102; Credit is allowed for only CMN 394 (Storytelling and Oral History), COM 342 or 394 (Storytelling and Oral History) |
| COM | 353 | Professional Communication | Introduces both verbal and written professional communication styles and technologies in preparation for communication-related internships and careers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectalism. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 377 | Communication, Terrorism, and National Security | Surveys strategic communication and its relationship to terrorism challenges facing the United States and the rest of the world. Begins with a look at language and definitions, how strategic communication functions are traditionally conceptualized, and the scope and extent of the terrorism problem. Focuses on the contemporary problems of terrorism, including its extent, tactics, and strategies and strategies that aim to combat it. Concludes with a look at new frontiers in the terrorism struggle, including new media and communication approaches. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: minimum 2.50; minimum Junior standing; Credit is allowed for only COM 377 or 394 (Communication, Terrorism and National Security) |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 383 | Communication and Mentoring | Explores the role of communication in face-to-face and online mentoring relationships with an emphasis on message shaping, nonverbal communication, professionalism and audience analysis. Applies practice and theory from a variety of lower-division communication courses (public speaking, professional and business, small group, intercultural and interpersonal) to prepare students for mentoring roles in the Communication Assessment Learning Lab (CALL) on ASU's west campus. During the semester, students (individually and as a member of a group) are engaged in creating and delivering both online and in-person public speaking tutorials. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 (or COM 110 or 230 or 259 or 263) with B or better; COM 225 with B or better; Credit is allowed for only COM 383 or 498 (Call Lab Mentorship) |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 404 | Research Apprenticeship | Direct research experience on faculty projects. Student/faculty match based on interests. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |

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| COM | 407 | Advanced Critical Methods in Communication | Examines critical approaches relevant to communication, including textuality, social theory, cultural studies, and ethnography. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 407 or 507 |
| COM | 408 | Quantitative Research Methods in Communication | Advanced designs, measurement techniques, and methods of data analysis of communication research. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 408 or 508 |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 414 | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 416 | Gender, Race, Colonialism, and Media | Explores how the mass media constructs gender and race and perpetuates colonial views of minorities and varied nationalities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 417 | Communication and Aging | Critical study of changes in human communicative patterns through the later adult years, with attention on intergenerational relationships and self-concept functions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 422 | Advanced Argumentation | Advanced study of argumentation theories and research as applied to public forums including: political, business, and legal contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: Minimum Junior standing; Minimum 2.00 GPA; ENG 101, 105, 107 or 111 with C or better |
| COM | 424 | Television Studies and Criticism | Surveys critical and historical approaches to television as a medium; to television research; and to television's effects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better or Junior standing with minimum 3.00 GPA |
| COM | 426 | Political Communication | Theories and criticism of political communication; including campaigns, mass persuasion, propaganda, and speeches. Emphasizes rhetorical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 429 | Semiotics and Visual Communication | Semiotic analysis of mediated forms of communication, including film, television, and photography. Includes the political and aesthetic dimensions of images. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better or Junior standing with minimum 3.00 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 441 | Performance Studies | Theory, practice, and criticism of texts in performance. Emphasizes the interaction among performer, text, audience, and context. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 and COM 308 with C or better |
| COM | 442 | Identity, Performance, and Human Communication | Explores communication dimensions of self and others as performance. Examines topics that include gender, race, sexuality, age, and ethnicity through performance. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 225 (or COM 241); Minimum 2.50 GPA |
| COM | 445 | Narrative Performance | Theory and practice of performing narrative texts (e.g., prose fiction, oral histories, diaries, essays, letters). Includes scripting, directing, and the rhetorical analysis of storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 with C or better |
| COM | 446 | Performance of Literature Written by Women | Explores, through performance and critical writing, literature written by women. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 451 | Communication and Work Relationships | Communication principles and practices associated with supervisory, peer, and client relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100; Minimum 45 completed hours; Minimum 2.50 GPA |
| COM | 452 | Communication and the Art of Happiness | Examines how communication behaviors relate to constructing happiness and wellbeing. Topics include gratitude, forgiveness, social support, appreciation, social networks and communicative contagion of mood intersecting with issues of dyadic, group and organizational communication. Auxiliary readings come from a variety of disciplines, including psychology, management, sociology, positive organizational scholarship and appreciative inquiry. Course activities include reading, field exercises, journal writing, exams, project presentation(s) and paper(s). | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: 2.50 GPA; Junior standing; Credit is allowed for only COM 452 or 494 (Communication of Happiness) |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 454 | Rhetorical and Critical Approaches to Public Relations | An historical and contemporary account of how public relations messages build corporate identities and persuade audiences by shaping public values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better OR Junior standing with minimum 3.00 GPA; Credit is allowed for only COM 454 or CMN 598 (Rhetorical/Critical Approaches to Public Relations) |
| COM | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 457 | New Media | Explores how new communication and information technologies affect communication and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better or Junior standing with minimum 3.00 GPA |

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| COM | 459 | Theory and Methods of Social Media Networks | A network-based perspective plays an increasingly important role in our understanding of contemporary communication process of which much has shifted from a hierarchical, densely bounded group basis to a personalized, lateral network. Especially, along with the popularity of social media, social networking has become a key term that characterizes our everyday life. Discusses the role of new media technologies in evolving networked society, and how online networks are intertwined with our offline life. Covers theories and computerized methods that help understand online network structure. Includes lectures and discussions on theoretical issues with hands-on exercises of analytic methods. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): junior standing; minimum 2.50 GPA; MAT 142 or higher with C or better; Credit is allowed for only COM 459 or COM 494 (Social Networks) |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 464 | Communicative Sexualities | Grounded in the discipline of communication, provides an introduction to the qualitative research practice of semiotic phenomenology. Examines sexuality as a personal, social, historical, and cultural phenomenon, wherein communication is studied as the mediating force through which meanings are ascribed to sexuality and sexual experience. Sexuality is studied as it manifests among a wide variety of people, practices, and contexts. U.S. American culture provides the primary cultural context. Addresses basic questions including: How do we understand sexuality? How have we come to know what we know about sexuality? How do we understand the relationship between sexuality as personal desire, and sexuality as social norm in specific cultural contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Junior or Senior standing; Minimum 2.50 GPA; Credit is allowed for only COM 464 or 494 (Communicative Sexualities) |
| COM | 465 | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 471 | International Communication | Explores the political, economic, sociocultural, and communicative dimensions of mediated communication across borders and the processes of globalization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Pre-requisites: Minimum 2.0 GPA; CMN 463 or COM 463 with C or better |
| COM | 477 | Sport, Culture, and Discourses | Introduces sport as a global economic and cultural force, and as a foundational discourse experienced largely through media. Facilitates the understanding of sport as a major cultural and socializing institution and, thus, as a key site for the construction of knowledge, understandings, ideologies, and identities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 483 | Advanced Communication and Mentoring | Students serve as peer mentors in the Communication Assessment Learning Lab (CALL) with instructional emphasis on speaker apprehension, listening, the dynamics of group communication and leadership. Through experiential learning, mentors employ ethical peer tutoring practices by coaching undergraduates in managing public speaking apprehension, speech development and organization. Further, mentors provide on-the-spot feedback to undergraduates relating to delivery techniques, style, nonverbal communication, persuasive strategies and the use of presentational material. | N | LEL | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 383 with C or better |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): Communication major; minimum 56 hours; minimum 2.50 GPA; COM 225 with C or better; COM 308 with C or better |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-7 | | |
| COM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 501 | Research Methods in Communication | Critical analysis of systems of inquiry in communication, focusing on the identification of variables and approaches to conducting research in communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications Graduate student |
| COM | 504 | Theories and Models in Communication | Theory construction, metatheoretical concerns, models, construct definition, and comparative analysis of current theories in communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications Graduate student |

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| COM | 507 | Qualitative Research Methods in Communication | Qualitative research methods, including interviewing, field methods, and other nonquantitative techniques for analyzing communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications Graduate student; Credit is allowed for only COM 407 or 507 |
| COM | 508 | Quantitative Research Methods in Communication | Empirical research designs, measurements, and statistical strategies and techniques in analyzing and evaluating experimental and descriptive research in communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Communications Graduate student. Credit is allowed for only COM 408 or COM 508 |
| COM | 521 | Rhetorical Criticism of Public Discourse | History and significance of rhetorical theory and criticism in the analysis of public discourse. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications Graduate student |
| COM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 604 | Theory Construction in Communication | Review and analysis of philosophical problems inherent in communicative research and of metatheories designed to deal with these problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 607 | Contemporary Rhetorical Methods | Analysis of issues in the practice of rhetorical communication research, including criticism and scholarship. | N | SEM | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 608 | Multivariate Statistical Analysis of Data in Communication | Statistical analysis of communication research data. Multivariate procedures used in communication research and methods of causal analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 609 | Advanced Qualitative Research Methods in Communication | Analysis of issues in the practice of qualitative communication research, including data gathering, fieldwork issues, analysis strategies, and reporting results. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications PhD student |
| COM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisites: Communications PhD student; COM 600 or COM 608 with B or better; COM 601 or COM 700 with B or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| COM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| COM | | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| COM | | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| COM | | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: minimum 25 hours |
| COM | | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Non-Communication student; Minimum 25 hours |
| COM | | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |
| COM | | Introductory Theories and Principles of Communication: Communication in Relationships, Organizations | Integrated introduction to the theories and principles of communication in public, interpersonal, and organizational contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-9 | | |

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| COM | | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |
| COM | | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| COM | | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU & C | Pre-requisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | Pre-requisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |

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| COM | | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Pre-requisites: Communication major or Public Relations and Strategic Communication minor student; Minimum 56 hours; Minimum 2.80 GPA; COM 225 (CMN 225) with C or better; COM 308 or 309 with C or better |
| COM | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| COM | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| CON | 100 | Introduction to Construction | Introduces construction industry sectors and professionals. Additional content includes developing personal competencies required of construction professionals. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 101 | Construction and Culture: a Built Environment | Analyzes the cultural context of construction, emphasizing its centrality in the evolution and expansion of built environments as expressions of ethical and historical value systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | HU & H & G | |
| CON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 221 | Applied Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): MAT 170 or higher with C or better; PHY 111 with C or better; PHY 113 with C or better |

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| CON | 223 | Strength of Materials | Analyzes strength and rigidity of structural members in resisting applied forces. Stress, strain, shear, moment, deflections, combined stresses, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): CON 221 with C or better |
| CON | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better. Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CON | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes Horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |
| CON | 244 | Working Drawing Analysis | Provides the ability to read and understand architectural plans; to understand drawing symbols, dimensions, abbreviations, and terms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 251 | Microcomputer Applications for Construction | Applies the microcomputer as a problem-solving tool for the constructor. Uses spreadsheets, information management, and multimedia software. | N | LAB | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better |
| CON | 252 | Building Construction Methods, Materials, and Equipment | Emphasizes Vertical construction. Methods, materials, codes, and equipment used in building construction corresponding to the division of the CSI Master Format. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; Credit is allowed for only CON 271 or CNE 271 |
| CON | 273 | Electrical Construction Fundamentals and Project Management | Electrical construction, design, estimating, scheduling and project management. Electrical safety, blueprints and symbols, theory, sequence of installation. National Electrical Code (NEC). | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CON | 310 | Testing of Materials for Construction | Structural and behavioral characteristics, engineering properties, measurements, and application of construction materials. Not open to engineering students. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisite: Construction BS student; CON 221 with C or better; CON 223 with C or better |
| CON | 345 | Mechanical Systems | Design parameters and equipment related to heating and cooling systems for mechanical construction. Biorelated aspects of mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; PHY 111 (or PHY 121) with C or better; PHY 113 (or PHY 122) with C or better; CON 221 with C or better; CON 252 |
| CON | 377 | Residential Construction Production Procedures | Process used in residential construction. How a house is built: design, permits, scheduling, codes, contracting, site management, mechanical/electrical. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS or Design BSD student; CON 221 with C or better; CON 252 |
| CON | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction BS major; CON 243 and 252 OR Construction Engineering BSE major; CON 243; Credit is allowed for only CON 383 or CNE 383 |
| CON | 384 | Environmental Aspects of Heavy Construction | Methods, measures and analysis related to control of erosion, dust generation and storm water discharge during projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major. Pre- or corequisite(s): CON 243. Credit is allowed for only CON 384 or CON 394 (Environmental Aspects of Heavy Construction) |
| CON | 389 | Construction Cost Accounting and Control | Nature of construction cost. Depreciation and tax theory and variable equipment costs. Cash flow theory, investment models, profitability, and analysis. Computer applications. Funding sources and arrangements. Builder's insurance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Pre-requisite: Engineering and Design BS or BSD student; CON 221 with C or better; CON 251, or Construction Engineering student |
| CON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Pre-requisite: Engineering BS or BSE student |
| CON | 424 | Structural Design | Economic use of concrete, steel, and wood in building and engineered structures. Design of beams, columns, concrete formwork, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering Construction BS students; CON 223 with C or better; Pre/Co-requisite: CIM 205 or CON 310 (with C or better if completed) |
| CON | 430 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only CON 430 or CON 494 (Facilities Management/Operations & Maintenance) or CON 530 or CON 598 (Facilities Management/Operations & Maintenance) |
| CON | 446 | Marketing for Construction | Provides key marketing practices to include strategic planning, marketing collateral, networking, business development, and interview preparation for project pursuits. Covers all aspects of service-based marketing topics and practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): CON 225; CON 221 with C or better |
| CON | 448 | Sustainable Construction | Studies the principles associated with sustainable construction: problem definition, definition of sustainability, measures of sustainability, examination of current industry practices, financial and resource impacts of sustainable construction, independent student investigation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS or Civil (Sustainable Engineering) student; Senior standing; Credit is allowed for only CON 448, CON 494 or CON 598 (Sustainability in Construction) |
| CON | 450 | Geotechnical Applications for Construction | Soil formation, engineering properties and use as building materials. Soil's influence on construction of built environment, including specifications and biological aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Management BS student; CON 223 with C or better; CIM 106 or CON 310 with C or better |
| CON | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271 and CON 383 or CNE 383 with C or better; Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CON | 454 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods and materials required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CNE 243 or CON 243; Credit is allowed for only CON 454 or CON 494 (Trenchless Construction Mth) or CON 554 |
| CON | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 453 or CNE 453 with C or better; Pre- or corequisite(s): CON 495 or CNE 495 with C or better if completed; Credit is allowed for only CON 455 or CNE 455 |

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|---------|----------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CON | 457 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BS Construction Management or BSE Construction Engineering major; Pre/Co-requisite(s): CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 465 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing and efficient practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 465 or CON 565 |
| CON | 467 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 467 or CON 567 or CON 494 (Advanced Procurement Systems) |
| CON | 468 | Mechanical and Electrical Estimating | Analysis and organization of performing a cost estimate for both mechanical and electrical construction projects. Computer usage. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; CON 273; CON 345 and CON 383 with C or better |
| CON | 471 | Mechanical and Electrical Project Management | Specialty contracts and agreements, scheduling, material handling, labor unit analysis, and job costing for mechanical and electrical construction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite: Construction BS student; CON 453 with C or better |
| CON | 472 | Development Feasibility Reports | Integrates economic location theory, development cost data, market research data, and financial analysis into a feasibility report. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Pre-requisite: Construction BS or Design BSD student; REA 380 |
| CON | 477 | Residential Construction Business Practices | Topics addressed include development, marketing, financing, legal issues, and sales. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering BS or Design BSD student; MKT 382 or MKT 395 with D or better OR CON 446 with C or better; CON 377 with C or better; CON 389 with C or better |
| CON | 483 | Advanced Building Estimating | Concepts of pricing and markup, development of historic costs, life cycle costing, change order and conceptual estimating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; CON 383 with C or better |
| CON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CON | 486 | Heavy Construction Estimating | Methods analysis and cost estimation for construction of highways, bridges, tunnels, dams, and other engineering works. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS major and CON 383 with C or better, or Construction Engineering BSE major |
| CON | 487 | Heavy Construction Project Management | Studies methods used to manage large magnitude heavy construction projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major; CON 243 (or CNE 243) with C or better; Credit is allowed for only CON 487 or 494 (Heavy Const Proj Mgmt) |
| CON | 488 | Heavy Construction Earthworks | Geotechnical issues with respect to foundation grading, forming and location for various types of infrastructure and transportation projects. Also includes streets, highway and embankment developments, retaining wall system, mechanically stabilized earth walls, and required quality control methods for these activities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CON 243; Credit is allowed for only CON 488 or CON 494 (Heavy Construction Earthworks) |
| CON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | | Prerequisite(s): Barrett Honors student |
| CON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction BS major with CON 383 or CNE 383 with C or better and CON 389 with C or better OR Construction Engineering BSE major; Credit is allowed for only CON 495 or CNE 495 |
| CON | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction BS major with CON 453 or CNE 453 with C or better OR Construction Engineering BSE major with COM 225 with C or better and CON 453 or CNE 453 with C or better; Credit is allowed for only CON 496 or CNE 496 |
| CON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-7 | | |
| CON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CON | 501 | Construction Research Methods | Data collection methodologies, applied parametric and nonparametric statistics, data analysis techniques, technical writing, and data presentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 530 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CON 430, 494 (Facilities Management/Operations & Maintenance), 530 or 598 (Facilities Management/Operations & Maintenance) |
| CON | 540 | Construction Productivity | Productivity concepts. Data collection. Analysis of productivity data and factors affecting productivity. Means for improving production and study of productivity improvement programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction MS or Construction Engineering MSE major |
| CON | 545 | Construction Project Management | Theory and practice of construction project management. Roles of designer, owner, general contractor, and construction manager. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction MS student; CON 495 with B or better |
| CON | 547 | Strategic Planning | Business planning process of the construction enterprise. Differences between publicly held and closely held businesses and their exposure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 551 | Alternative Project Delivery Methods | Design/construction interaction; conceptual estimation and scheduling; the RFI/RFP process; legal, insurance, risk allocation issues; procurement and selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|----------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CON | 554 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues, and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods, and materials required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 557 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: MS or PhD Construction Management or MSE Construction Engineering major. Pre/Corequisites: CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 561 | International Construction | Investigation of the cultural, social, economic, political, and management issues related to construction in foreign countries and remote regions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering Graduate student |
| CON | 563 | Facility Management Fundamentals | Operations and maintenance, environmental issues, computerized management and maintenance systems, strategic planning, asset management, construction and design, and LEED/LEED-EB. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 565 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing, and efficient practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only CON 465 or CON 565 |
| CON | 567 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CON 467, 567 or 494 (Advanced Procurement Systems) |
| CON | 570 | Introduction to Advanced Technology Facilities | Introduces advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. The constructor's viewpoint, including: planning, structures, mechanical, and tool installation. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 571 | Construction of Advanced Technology Facilities | Construction issues for advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. Issues include scheduling, cost estimating, project management, mechanical, safety, commissioning and tool hookup. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: CON 570 with C or better |
| CON | 575 | Information Technology in Construction | Uses virtual construction methodologies to improve the construction enterprise using communications, facility modeling, and decision making. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 589 | Construction Company Financial Control | Financial accounting and cost control at the company level in construction companies. Accounting systems. Construction project profit calculations. Financial analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering MS, MSE or PHD student |
| CON | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Prerequisite(s): Construction graduate student |
| CON | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 700 | Research Methods | Course on research methods in a specific discipline. | N | RSC | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|----------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-----------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------|
| CON | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |
| CON | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |
| CPI | 101 | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 111 | Game Development I | Introduces video game design, art theory, and concepts as they apply to video game development. Basic art principles used in game development. Covers the fundamental video game art principles of 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. Also includes game design, game production, asset production, and game programming. Hands-on experience by creating 2-D game prototypes belonging to different video game genres and evaluating the techniques. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 200 | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |
| CPI | 211 | Game Development II | Introduces the basics of 3D game development by using a game engine. Focuses on the pipeline of 3D game development including environment and contents creation, scripting to control components, and graphics user interfaces development. Develops several 3D games for multi platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 111 with C or better |
| CPI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 310 | Web-Based Information Management Systems | Relational database design, entity-relationship modeling, relational algebra, SQL, database access through Web, Web data management, introduction to XML, fundamentals of Web application development, Web server architectures, lecture, in-class lab activities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 311 | Game Engine Development | State-of-the-art techniques for computer game design and programming with an emphasis on 3-D graphics and interaction. Focuses on a practical, example-driven approach to learning the unique art of 3-D game development. Topics include graphics game engines, textures, shader programming, artificial intelligence, physics, modeling, sound effects, and techniques for user interfaces. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 321 | Fundamentals of Game Art | Introduces art theory and concepts as they apply to video game development. Covers 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 350 | Evaluation of Informatics Systems | Methods for evaluation of informatics systems, including design of computational and human experiments, ethnography, and analytic techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s) with C or better: GCU 495 (or IEE 380 or STP 226 or 231 or 420); BS Informatics major |
| CPI | 360 | Decision Making and Problem Solving | Practical use of database systems, computer graphics, and modeling to inform decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 400 | Scientific Computing and Visualization | Introduces scientific computing and visualization, supported by data acquisition, geometric modeling, and computer graphics. Covers the necessary mathematical foundations, data structures, and algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 101 with C or better; CPI 200 with C or better |
| CPI | 411 | Graphics for Games | Examines real-time rendering of high-quality interactive graphics. Studies advances in graphics hardware and algorithms that make this possible. Examples of techniques and topics include nonphotorealistic rendering, occlusion culling, level of detail, terrain rendering, shadow generation, image-based rendering, and physical simulation. Helps students add graphics-related features to the game architecture developed in CPI 311. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |

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| CPI | 412 | Cognitive Systems and Intelligent Agents | Advanced concepts and techniques of rule-based programming and agent architectures, incorporating ideas from artificial intelligence, cognitive psychology, and linguistics, along with their use in creating intelligent synthetic characters for interactive games and other virtual environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |
| CPI | 421 | 3-D Modeling and Texturing | Provides working knowledge of 3-D modeling, texture mapping, and paint concepts for the creation of 3-D video games art assets. Students work on concepts such as 3-D lighting, high polygon mesh rendering, and various third-party software and how to integrate them into the asset production pipeline. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 321 with C or better |
| CPI | 422 | 3-D Animation and Rigging for Video Games | 3-D rigging, skinning, and 3-D animation techniques for video game development. Includes totescoping for character animation, animation loops, and integration of motion capture data, as well as prop animation. Covers operation of 3-D cameras and 3-D rendering. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 321 with C or better |
| CPI | 430 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 4 | CS | Prerequisites: AML 100 or MAT 142, 170, 210, 265 or 270 with C or better OR Mathematics Placement Test score of 50% or higher; Minimum 56 hours. Credit for only ASB 430, CPI 430, or AML 330 |
| CPI | 441 | Gaming Capstone | Industry-oriented course emphasizing the video game development process, technical skills, teamwork and communication among the students enrolled in the gaming certificate. Students partner with local industry involved in game development, visual art, and educational gaming and solve real-world problems by working in a team comprised of students from the three tracks available within the certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): BS Informatics or BIS (Computer Gaming) or Computer Gaming certificate; senior standing |
| CPI | 460 | Intelligent Interactive Instructional Systems | Intelligent interactive instructional systems serve as tutors, as learning companions or both. Covers their design, the technology that powers them, the learning theories that motivate them and results from experimental evaluations. Emphasizes intelligent tutoring systems, as they are a more mature technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better; Credit is allowed for only CPI 460 or CSE 494 (Intelligent Instr Sys) |
| CPI | 470 | Application of Modeling and Visualization | Applies modeling, computing, and visualization techniques to real data; presents results in a meaningful visual environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1 | | Pre-requisite: CPI 400 |
| CPI | 480 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | Pre-requisite: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPI 480 or MBB 355. |
| CPI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-12 | | |
| CPI | 485 | Informatics Capstone I | Team-based design of an informatics system; working with clients; development of requirements, use cases, class/object diagrams, and plans for quality assurance and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | L | Pre-requisite: CPI 310, 350 and CSE 463 with C or better; Informatics BS student |
| CPI | 486 | Informatics Capstone II | Implementation of the informatics system designed during CPI 485; work processes; keeping designs consistent with implementations; conducting QA and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 4 | L | Pre-requisite: Informatics BS student; CPI 485 with C or better |
| CPI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CPI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CPI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-3 | | |
| CPI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPI | | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CPI | | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |
| CPP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |

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| CPP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-7 | | |
| CPP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPP | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 613 | Child Counseling | Applies counseling theory in working with children in clinics and elementary schools. Integrated practicum available with instructor approval. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 623 | Counseling At-Risk Youth | Examines the behaviors that place adolescents at risk for not achieving career goals and interventions to address these behaviors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 634 | Organizational Development and Planned Change | Organizational/individual dynamics, including theory, analysis, techniques, and consultation/intervention strategies used in organizational development. | N | PRA | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Technology and Innovation or Fulton Engineering Graduate student |
| CPY | 644 | Psychology of Careers | Advanced career counseling, including theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 |
| CPY | 645 | Professional Issues and Ethics | Ethical, legal, and professional issues of concern to practitioners and researchers functioning in a variety of settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 650 | Counseling Latinos | Survey course addressing mental health concerns and perspectives for individuals and families of Latino, Spanish-speaking origin. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 522 |
| CPY | 651 | Personality Assessment | Training in the use of major objective personality instruments to assess psychological symptoms; emphasizes MMPI-2 and MCMI-III. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 523 |
| CPY | 660 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CPY | 668 | Grant Writing and Grant Makers: The Washington Context | Develops successful proposals for educational research projects. Students gain experience writing for federal agencies, reviewing, and being evaluated on grant proposals. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CPY or HED 668 |
| CPY | 670 | Individual Differences | Focuses on definitions and assessment of ways humans vary on psychological constructs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 671 | Multicultural Counseling | Provides awareness of the influence of sociocultural variables on human development and explores implications for counseling minority populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 672 | Human Diversity: Social Psychological Perspectives | Implications for psychological practice of social, psychological, and biological factors in the development of behavioral differences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 674 | Counseling Women | Explores women's development and its implications for counseling. Sexism in mental health, sex differences in diagnosis and psychopathology, and women's particular treatment needs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 675 | Health and Wellness Counseling | Theory, research, and practice in health and wellness counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CED 577 with C or better |
| CPY | 676 | Social Bases of Behavior | In-depth examination of contemporary research and theory in selected areas of social psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 677 | Advanced Counseling | Advanced topics in counseling theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 with C or better |
| CPY | 678 | Supervision Theory | Models of therapist development and clinical supervision. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 679 | History and Systems of Psychology | Examines the development and differentiation of the discipline of psychology from its origins in philosophy to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |

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| CPY | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 694 | Substance Abuse: Therapy and Psychoeducation | Develops knowledge and skills for conducting psychotherapeutic and educational interventions to address substance use disorders and associated concerns. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 701 | Science and Practice of Counseling Psychology | Directed experiences involving the integration of theory, research, and practice in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 702 | Research Methods in Counseling Psychology | Applies experimental and/or quasi-experimental methods to theory construction and treatment evaluation in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COE 502 |
| CPY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CRD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| CRD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| CRD | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| CRD | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102 with a C or better; MAT 142 or higher with a C or better; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| CRD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: CRD, NLM, PRM or TDM 210 with C or better; CRD, NLM, PRM or TDM 301 with C or better; senior standing; 2.50 GPA; Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| CRD | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| CRD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |

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| CRD | 502 | Statistical and Data Analysis | Introduces descriptive and inferential methods used in community development, with an emphasis on nonprofit, tourism, and recreation sciences. Students gain experience using statistical software. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 530 | Community Services Management | Examines and applies organizational behavior, leadership, human resources, development, planning, and risk management to profession. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 552 | Critical Issues | Examines critical research issues in the leisure, recreation and tourism fields. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 555 | Theoretical Perspectives in Community Development | Reviews theoretical and empirical literature in community development with an emphasis on nonprofit, tourism, and recreation sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 569 | Advanced Tourism and Recreation Studies | Advanced study of tourism with an emphasis on relevant practices, theories, and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 570 | Social Aspects of Outdoor Recreation Management | Analyzes the social aspects of natural resource science, policy, and management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| CRD | 579 | Tourism Analysis | Examines theories and methods that govern tourist behavior and their relevance to destination development, operations, and management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |
| CRD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 610 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. Considers issues at different scales, ranging from urban to rural, local to global, historical to contemporary. Critically examines the role of public, private, and nonprofit institutions in promoting quality of life. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 620 | Community Research Methods | Introduces community research methods, with emphasis on methodological questions and techniques relevant to contemporary community-based research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 640 | Research Seminar in Community Resources and Development I | A seminar designed to explore issues related to advancing a career as a researcher in the fields associated with community resources and development (i.e., nonprofit, recreation and parks, tourism). Critical to this study is an understanding of the conduct of high quality research, an understanding of issues that arise in professional settings (e.g., expediency vs. effectiveness), and ethical principles and processes that undergird research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |
| CRD | 650 | Research Seminar II | Helps prepare doctoral students to become productive and successful social scientists in community resources and development. Covers a wide range of topics under the broader conceptual umbrellas of research, teaching, and service. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |

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| CRD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |
| CRD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 100 | Introduction to Criminal Justice | Overview of the justice system. Roles of law enforcement personnel, the courts, and correctional agencies. Philosophical and theoretical views in historical perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 201 | Criminal Justice Crime Control Policies and Practices | Introduces concepts as the application of situational crime prevention strategies, problem-oriented crime control approaches, hot spots policing, defensible space, and crime prevention through environmental design. Students work to apply academic theory to actual crime problems in the local area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Credit is allowed for only CRJ 201 or 294 (Criminal Justice Crime Control) |
| CRJ | 203 | Courts and Sentencing | History and development of courts, trial by jury, and other dispute resolution mechanisms; selection and removal of judges and juries; organization, structure, and jurisdiction of courts; trial and nontrial processes of the judiciary. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 204 | Juvenile Justice | History and development of the juvenile court and the juvenile justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 225 | Introduction to Criminology | Provides a broad survey of criminal behavior and the major attempts to explain it. Topics include definitions and measurement of crime, theories of crime causation, and crime types. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Credit is allowed for only CRJ 225 or 294 (Introduction to Criminology) |
| CRJ | 230 | Introduction to Policing | Introduces policing in the United States covering the history of police, contemporary police work, and problems in policing. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 240 | Introduction to Corrections | Introduces the structure and function of the corrections system from historical and contemporary perspectives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 260 | Substantive Criminal Law | Criminal liability. Crimes against persons, property, and society. Governmental sanctions of individual conduct as formulated by legislatures and the courts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 270 | Community Relations in the Justice System | Focuses on developing an informed plan and policy for incorporating research findings about the surrounding community within various justice services and agencies. Topics include social stratification, minority groups, and victimology. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 284 | Professional Growth in Criminal Justice | Engages students in targeted field practice. Activities include: identifying and touring at two criminal justice agencies, conducting one professional interview, observing one court procedure, participating in small group discussions and exercises, enhancing interpersonal skills, video reviews, listening to professional guest speakers employed in the field, exploring and incorporating research tools, maintaining journal entries, developing one professional resume, and building opportunities to network professionally. | N | LEC | N | YGB | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 |
| CRJ | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 302 | Research Methods | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Also stresses methods for conducting research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L | Pre-requisite: MAT 117, 119, 142, 114, 170, 210, or 270 with C or better; CRJ 100 with C or better; CRJ 201 with C or better |
| CRJ | 303 | Statistical Analysis | Fundamentals and application of descriptive and inferential statistics, with emphasis in the administration of justice area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | CS | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; MAT 117, 119, 142, 170, 210 or 270 with C or better |
| CRJ | 305 | Gender, Crime, and Criminal Justice | Studies women as offenders, victims, and professionals in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 306 | Race, Ethnicity, Crime, and Criminal Justice | Studies minority issues in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |

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| CRJ | 308 | Advanced Criminological Theory | Focuses on the definition, measurement, causes, consequences, and control of crime. Explores fundamental debates in criminological thought through original readings in the field. Emphasizes critical assessment of dominant criminological theories. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 with C or better; CRJ 201 with C or better; CRJ 225 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 308 or 394 (Advanced Criminological Theory) |
| CRJ | 315 | Police Organization and Management | Provides a thorough understanding of the structure, processes, and behavior of police organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100, CRJ 301, JUS 100, JUS 105 or JUS 305 with a C or better; CRJ 230 (AJIS 230) with C or better. |
| CRJ | 321 | Imperatives of Proof | Problems and means of establishing identity and fact in relation to arrest, detention, adjudication, sentencing, and correctional case management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 350 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 403 | Victims and the Criminal Justice System | Examines criminal victimization in the United States. Topics may include: victimization theories, the nature and extent of victimization, the impact of crime on victims and society, the interactions between victims and the criminal justice system, and victim rights and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 403, 494 (Victimology) or 494 (Victims and the Criminal Justice System) |
| CRJ | 404 | Juvenile Delinquency | Examines the nature of delinquency related to causes, correlations and current strategies being used to reduce its occurrence. Topics may include: policies and programs, juvenile hate crime, social reaction and labeling theories, learning problems and delinquency, gangs, drugs, and capital punishment for juveniles. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 404 or 494 (Juvenile Delinquency) |
| CRJ | 405 | Neighborhoods and Crime | Draws from the ecology of crime perspective as well as urban sociology to study variation in crime across neighborhoods with emphasis on how social institutions and public policy can influence community crime patterns. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 405 or 494 (Neighborhoods and Crime) |
| CRJ | 406 | Sex Crimes | This course examines the prevalence, nature, and etiology of sex crimes. Crimes examined include sex-related homicide, sexual assault, intrafamilial sexual abuse, sex trafficking, and prostitution. The course also provides a comprehensive overview of the response of the criminal justice system to victims and perpetrators of sex crimes, with a focus on the investigation of sex crime and the prosecution and punishment of sex offenders. Other issues that will be covered are the history and impact of the rape law reform movement, rape trauma syndrome, sex offender treatment strategies, and the history and impact of sex offender notification and registration laws. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing. Credit is allowed for only CRJ 406 or 494 (Sex Offenders and Sex Crimes) |
| CRJ | 408 | Drugs and Crime | Address the problems, practices, programs, and policies associated with drugs, crime, and drug policy. Primarily focuses on the nature, patterns, and trends of drug use, the relationships between drug use and crime, and criminal justice policy targeted at drug use. Also focuses on discussing various research findings and the controversies surrounding the relationship between drugs and crime. Teaches students about theories of drug use and crime, the basic elements of drugs, and the history of drug control and contemporary drug policies. Pays specific attention to the war on drugs and how the role of race was and is intertwined with drugs and crime. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 409 | Police Accountability | Using historical, theoretical and practical approaches, explores major issues in police accountability and community policing including command and control systems, managing police culture, accountability to the community, and training. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 and 201 with C or better (or BAS Appl Sci maj or BIS Crimnlogy and Crim Justice emph or Crimnlogy and Crim Justice min with CRJ 201 with C or better); Jr, Sr or Postbacc standing. Credit for only CRJ 409 or 494 (Police Actability) |
| CRJ | 410 | Procedural Criminal Law | The criminal process. Constitutional and legal problems associated with arrest, search and seizure, and due process of law. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 412 | International Terrorism | Provides a systematic examination of the structural, organizational and political characteristics that affect the topic of international terrorism. Also examines the legal ramifications of the Patriot Act and its legal implications upon our judicial system. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and 201 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 412, 494 (Homeland Security) or 494 (International Terrorism) |
| CRJ | 413 | Forensics | Provides an overview of forensic science as it is practiced in a modern crime laboratory. Examines how the principles of chemistry, biology, physics and other scientific disciplines are applied to the analysis of physical evidence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 413 or 494 (Forensics) |
| CRJ | 417 | Cyber Terrorism | Focuses on the specific avenues of terrorism that are perpetuated in the digital world of the 21st century. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 and 201 with a C or better and Junior or Senior Standing |
| CRJ | 419 | Domestic Terrorism | Develops a foundation and understanding of how domestic terrorism has evolved in the United States of America. Introduces the history of significant events, current events, actors and organizations, and how the future of domestic security issues affects the internal and external politics of the USA. Also examines the problems that have been faced, created, and how other actors react to the United States approach to protect itself and combat Domestic Terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 419 or 494 (Domestic Terrorism) |

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| CRJ | 422 | Violence in America | Provides undergraduate students with an understanding of violence in American society. Explores the meanings and measure of violence, as well as theoretical and historical context. Examines multiple dimensions of violence, including domestic, gang-related, terrorism, homicide, hate crimes, school violence and sexual assault. Explores, in addition to theoretical discussion, patterns, prevention, policy and practical implications. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 422 or 494 (Violence in America) |
| CRJ | 443 | Community Corrections | Examines the probation and parole functions as well as the numerous and diverse types of community corrections programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 450 | Crime Analysis | Techniques of crime analysis and crime mapping and how they are practiced in everyday policing. Focuses on issues in crime analysis and crime mapping, critiquing current practices, and reviewing some of the technology that is used. Covers topics such as: introduction to crime analysis and crime mapping; environmental criminology; data and technology; and specific techniques and examples used in tactical, strategic and administrative crime analysis. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 201 with C or better; junior standing |
| CRJ | 461 | Domestic Violence | Legal, historical, theoretical, and treatment aspects of domestic violence, including child abuse, woman battering, incest, and marital rape. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |
| CRJ | 462 | Gangs | Critical examination of the history and development of gangs, including criminal justice system responses to gangs and gang-related behaviors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |
| CRJ | 463 | White Collar Crime | Overview of major issues in business, professional, and official rule violations. Includes consumer fraud, securities violations, unethical professionalism, and political corruption. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 464 | Organized Crime | The nature of organized crime and its illegal activities, theories of containment, and efforts by justice agencies to counter its dominance in society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 470 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L or SB | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; ENG 101, 105 or 107 with C or better. Junior or Senior standing |
| CRJ | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): CRJ 201 with C or better. CRJ 284 with Y grade if completed |
| CRJ | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | | Pre-requisite: Barrett Honors student; CRJ 100, CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | L | Pre-requisite: Barrett Honors student; CRJ 201 with C or better |
| CRJ | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Pre-requisite: CRJ 201 with C or better; Minimum Junior standing |
| CRJ | 495 | Student Assessment | Students may attend a mid-semester information session on the assessment process. At the end of the semester, students take part in a standardized examination and self-administered survey. Y/E grade only. Students must register for this class their final semester. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 0 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 501 | Seminar in Criminal Justice | Overview of the American criminal justice system, with emphasis on policy issues in police, courts, sentencing, corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 502 | Seminar in Criminology | Theory and research on the nature, causes, and prediction of criminal careers and events. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 503 | Research Methods | Introduces data analysis; overview of research methods used in social science research, including experimental design, survey research, field research, and evaluation research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 504 | Statistical Tools for Criminology and Criminal Justice | Focuses on essential statistical analysis that can be used in criminal justice and related agencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 505 | Theory and Practice in Criminal Justice | Capstone course for the MA in Criminal Justice; provides a synthesis of the criminal justice system. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 510 | Criminal Justice Planning and Program Evaluation | Examines the application of alternative models of strategic planning to the criminal justice system. Covers methods of evaluating criminal justice policies and practices. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 511 | Applied Data Analysis in Criminal Justice | Examines a variety of tools used in the analysis of criminal justice data, including GIS mapping. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 512 | Seminar in Policing | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 513 | Seminar in Courts and Sentencing | Overview of the nature, proposed principles, and theoretical doctrine of the courts and sentencing policies in criminal justice. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CRJ | 514 | Seminar in Corrections | Theory, research, and policy issues regarding community-based and institutional correction programs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 515 | Seminar in Women and Crime | Introduces students to issues regarding women and the criminal justice system, focusing on their roles as offenders, victims and professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 516 | Seminar in Criminal Justice Organization and Management | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 517 | Seminar on Juvenile Delinquency and Juvenile Justice | Examines patterns and correlates of delinquency within the context of theories of delinquency. Reviews the response of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 518 | Seminar on Race/Ethnicity, Crime, and Justice | Theoretical perspectives and research on the overrepresentation of racial minorities as victims, offenders, and defendants in the criminal justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 519 | Seminar on Victimization | Examines theory and research concerning victimization and consequences for victims, society, and the justice system. Also examines effective responses to victims' post-crime needs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 520 | Seminar on Violent Crime | Examines patterns and correlates of violent crime, as well as prevention strategies and policy implications. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 521 | Seminar on the Nature of Crime | Examines patterns and correlates of crime at individual, situational, and aggregate levels. Topics include defining crime, offender typographies, and criminal careers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 522 | Seminar on Gangs and Crime | Theoretical perspectives and research on gangs and crime, and on the role of the community and the criminal justice system in causes and control. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 524 | Seminar on Punishment and Society | Examines the fundamental philosophical principles of justice and punishment. Includes a comparative and historical perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 525 | Seminar on Life-Course Criminology | Provides an intensive examination of life-course explanations of crime, the life-course perspective and a theoretical orientation, and research methods used in life-course research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 526 | Theories of Crime Causation | | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Criminal Justice MA or Criminology and Criminal Justice MS or PhD major; Credit is allowed for only CRJ 526 or 598 (Theories of Crime Causation) |
| CRJ | 527 | Police Accountability | Examines the great authority of police, the various and most common ways that police abuse that authority, the consequences of those abuses, and accountability mechanisms that can prevent those abuses from occurring. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Justice major; Credit is allowed for only CRJ 527 or 598 (Police Accountability) |
| CRJ | 528 | Prison and Jail Administration | Overview of prison and jail administrative practices, with emphasis on policy and management issues in modern correctional institutions. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminal Justice MA or Criminology and Criminal Justice MS or Criminology and Criminal Science PhD student |
| CRJ | 529 | Community Corrections | Provides a review of theory, research and policy focusing primarily on correctional strategies and programs that take place within the community setting, as well as the function of community corrections within the larger correctional system. Gives particular attention to the purpose and goals of community-based corrections; the historical development of probation and parole practices; and contemporary community corrections programs and strategies such as evidence-based practices, risk assessment, offender reentry, sex offender management, diversion, restitution, community service programs and other emerging alternatives to traditional incarceration. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Science student |
| CRJ | 534 | Program Evaluation in Criminal Justice | Covers methods of program evaluation, principles of research design, and evaluation tools and resources. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 553 | Terrorism and Weapons of Mass Destruction | Historical evolution of terrorism and weapons of mass destruction. Analyzes current theories and mitigation, preparedness, and response tactics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 554 | Homeland Security | Presents skills necessary to develop policies, strategies, programs, and organizational structure of an all hazards/all risk homeland security program. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only PAF 461 or 554 |
| CRJ | 556 | The Foundations of Homeland Defense and Security | The enemy, policies, key players, and legal issues surrounding homeland defense and security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 557 | Multidisciplinary Approaches to Homeland Defense and Security: Collaborating to Integrate | Multidisciplinary approach to prevention, mitigation, preparedness, response, and recovery from incidents of national significance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 558 | Strategic Planning and Organizational Imperatives in Homeland Defense and Security | Efforts to integrate and mobilize government and private sector resources for homeland defense and security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 559 | Special Topics in Homeland Defense and Security | Discusses contemporary challenges of asymmetric warfare, terrorism, and the virtual global battlespace, as well as emerging threats to homeland security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Criminology and Criminal Justice MS student |
| CRJ | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |

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| CRJ | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 601 | Seminar on Criminological Theory | Examines historical and contemporary criminological theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 602 | Seminar on Criminal Justice Policies and Practices | Analyzes responses to crime and the operation of criminal justice system, with emphasis on theory and research on effectiveness of policies and practices of the system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 603 | Advanced Research Design | Exposes students to advanced topics in research design and methodology in preparation for writing the doctoral dissertation. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 604 | Advanced Statistical Analysis | Use and application of advanced statistical techniques and multivariate analysis of data. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 605 | Topics in Quantitative Methods | Explores advanced techniques of statistical analysis within the field of criminal justice. | N | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 606 | Advanced Topics in Theoretical Criminology | Focuses on criminological theory construction, historical and contemporary theoretical debates within criminology, theory testing, empirical support for theories, and theoretical integration. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 607 | Advanced Topics in Policing | Covers the major issues related to policing and police organizations in the United States. Principal focus on policing and police organizations in large cities, with a focus on police organizational structure, police culture, police organizational environment, police decision making and change in the police organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 608 | Advanced Topics in Courts and Sentencing | Focuses on recent research on charging, plea bargaining, bail decision making, jury decision making and sentencing, as well as the impact of recent reforms directed at the criminal court system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 609 | Advanced Topics in Corrections | Provides a critical examination of the theoretical framework underpinning current correctional policy (institutional and community based), as well as advanced, in-depth analyses of contemporary issues surrounding corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 610 | Advanced Topics in Juvenile Justice | Examines the meaning of the concept of juvenile delinquency as a separate entity in the criminal justice system. Considers the relationship between social attitudes and definitions of youthful law violation, and reviews studies on various forms of delinquency, such as drug offenses, sex delinquency, and status offenders. Also focuses on the internal workings of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 611 | Advanced Topics in Crime and Victimization | Examines research on criminal offending and victimization, focusing on the correlates of offending and victimization, risk and protective factors, and policies designed to reduce the impact of crime on victims. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 612 | Advanced Topics in Race, Gender, and the Criminal Justice System | Examines the interrelationships among race and ethnicity, gender, crime and the criminal justice system. Focuses on theoretical perspectives and empirical research on racial minorities and women as victims, offenders, and criminal justice professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 613 | Qualitative Methods | Provides students with an examination of the design, execution, and write-up of qualitative research. Discusses methods of data collection, including participant-observation, ethnography, and interviewing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 792 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |

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| CRJ | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CSE | 100 | Principles of Programming with C++ | Principles of problem solving using C++, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 110 | Principles of Programming with Java | Concepts of problem solving using Java, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 120 | Digital Design Fundamentals | Number systems, conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 180 | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 182 | Applied Problem Solving with C#.Net | Introduces object oriented programming, problem solving, fundamental algorithms and techniques, computer systems concepts, and implementation of programs using Visual C#.Net platform. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 205 | Object-Oriented Programming and Data Structures | Problem solving by programming with an object-oriented programming language. Introduces data structures. Overview of computer science topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | Pre-requisite: CSE 110 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| CSE | 220 | Programming for Computer Engineering | Introduction to C/C++, systems programming, and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 205 with C or better |
| CSE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization, instruction set architecture, assembly language, processor organization and design, memory organization, IO programming, exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 100, 110 or 200 with C or better OR Computer Science or Computer Systems Engineering Graduate student; Credit is allowed for only CSE 230 or EEE 230 |
| CSE | 240 | Introduction to Programming Languages | Introduces the procedural (C/C++), applicative (LISP/Scheme), and declarative (Prolog) languages. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): CSE 205 with C or better or Geographic Information Science major with GIS 321 with C or better |
| CSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 301 | Computing Ethics | Ethics for computing majors: history of computing, intellectual property, privacy, ethical frameworks, professional ethical responsibilities, and risks of computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 205 with C or better |
| CSE | 310 | Data Structures and Algorithms | Advanced data structures and algorithms, including stacks, queues, trees (B, B+, AVL), and graphs. Searching for graphs, hashing, external sorting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s) with C or better: CSE 220 or 240; MAT 243 (or 300 for CMS); Computational Math Sci (CMS), Computer Science, Computer Systems Engineering, Digital Culture (Media Proc), Engineering Management, Geo Info Sci or Informatics or BM/CSE grad |
| CSE | 320 | Design and Synthesis of Digital Hardware | Design and synthesis of digital hardware with hardware description language, computer-aided design tools, and programmable devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better |
| CSE | 325 | Embedded Microprocessor Systems | System-level programming and analysis of embedded microprocessors systems. Fundamental concepts of digital system design for embedded system applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better; Credit is allowed for only CSE 325 or 421 |
| CSE | 340 | Principles of Programming Languages | Formal syntactic and semantic descriptions, compilation and implementation issues, and theoretical foundations for several programming paradigms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 310 with C or better; CSE 230 or EEE 230 with C or better OR CSE Graduate student |
| CSE | 355 | Introduction to Theoretical Computer Science | Introduces formal language theory and automata, Turing machines, decidability/undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS students; CSE 310 with C or better OR CSE Graduate student |
| CSE | 360 | Introduction to Software Engineering | Software life cycle models; project management, team development environments and methodologies; software architectures, quality assurance and standards; legal, ethical issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems BSE or Computer Science BS or Geographic Information Science BS or Engineering Mgmt BSE student or Biomedical Informatics BS; CSE 220 or 240 with C or better, or Computer Science Graduate student |
| CSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 408 | Multimedia Information Systems | Design, use, and applications of multimedia systems. Introduces acquisition, compression, storage, retrieval, and presentation of data from different media such as images, text, voice, and alphanumeric. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 412 | Database Management | Introduces DBMS concepts. Data models and languages. Relational database theory. Database security/integrity and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Biomedical Informatics BS or Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Engineering graduate; Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |

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| CSE | 414 | Advanced Database Concepts | Object-oriented data modeling, advanced relational features, JDBC and Web access to databases, XML and databases, object-oriented databases, and object-relational databases. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 412 with C or better |
| CSE | 420 | Computer Architecture I | Computer architecture. Performance versus cost tradeoffs. Instruction set design. Basic processor implementation and pipelining. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 (or CSE 330) with C or better; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 423 | Systems Capstone Project I | Development process: specification, design, implementation, evaluation, and testing with economic, social, and safety considerations. Technical communication and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Prerequisite(s): Computer Systems Engineering BSE student; senior academic level; Prerequisite(s) with C or better: CSE 310, 320, 325 and 360; Credit is allowed for only CSE 423 or 485 |
| CSE | 424 | Systems Capstone Project II | Continuation of capstone project started in CSE 423. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Systems Engineering BSE student; Senior standing; CSE 423 with C or better |
| CSE | 430 | Operating Systems | Operating system structure and services, processor scheduling, concurrent processes, synchronization techniques, memory management, virtual memory, input/output, storage management, and file systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR CSE Graduate student |
| CSE | 432 | Operating System Internals | IPC, exception and interrupt processing, memory and thread management, user-level device drivers, and OS servers in a modern microkernel-based OS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 430 with C or better |
| CSE | 434 | Computer Networks | Network architecture and protocols; principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR Computer Engineering graduate student; Credit is allowed for only ACO 330 or CSE 434 |
| CSE | 438 | Embedded Systems Programming | Development of embedded system software, I/O handlers, and multiple threaded programs. Scheduling algorithms. Embedded software structures. Real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 325 with C or better |
| CSE | 440 | Compiler Construction I | Introduces programming language implementation. Implementation strategies such as compilation, interpretation, and translation. Major compilation phases such as lexical analysis, semantic analysis, optimization, and code generation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 445 | Distributed Software Development | Distributed system architectures and design, service-oriented computing, and frameworks for development of distributed applications and software components. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 360 with C or better OR Computer Engineering graduate student |
| CSE | 446 | Software Integration and Engineering | Software development using architecture design, composition, workflow, services, data resources, data representations, data management, and development tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Systems Engineering BSE or Computer Science BS student; CSE 445 with C or better; Credit is allowed for only CSE 446, 494 (Software Integration and Engineering) or 598 (Software Integration and Engineering) |
| CSE | 450 | Design and Analysis of Algorithms | Design and analysis of computer algorithms using analytical and empirical methods; complexity measures, design methodologies, and survey of important algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 457 | Theory of Formal Languages | Theory of grammar, methods of syntactic analysis and specification, types of artificial languages, relationship between formal languages, and automata. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 459 | Logic for Computing Scientists | Propositional logic, syntax and semantics, proof theory versus model theory, soundness, consistency and completeness, first order logic, logical theories, automated theorem proving, ground resolution, pattern matching unification and resolution, Dijkstra's logic, proof obligations, and program proving. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 460 | Software Analysis and Design | Object-oriented and structured analysis and design, software architecture and design patterns; component-based development; software safety and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Systems Engineering BSE or Computer Science BS student; BS Geographic Information Science ; CSE 360 with C or better |
| CSE | 463 | Introduction to Human Computer Interaction | Design, evaluate, and implement interactive software intended for human use. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS, Computer Systems Engineering BSE student; CSE 310 with C or better; OR Informatics BS or Digital Culture (Media Processing) BA student; CPI 310 with C or better |
| CSE | 464 | Software Quality Assurance and Testing | Software quality assurance (SQA), software quality metrics, software configuration management, software verification and validation, reviews, inspections, understanding software testing process, functional testing, structural testing, model-based testing, integration, system, and regression testing techniques, software life cycle models and software testing, testing distributed software, bug management, and use of testing tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: BSE Computer Systems Engineering or BS Computer Science student; CSE 360 with C or better; Credit is allowed for only CSE 464, 494 or 598 (Software Quality Assurance and Testing) |
| CSE | 465 | Information Assurance | Concepts of information assurance (IA); basic IA techniques, policies, risk management, administration, legal and ethics issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Information Systems BS, Computer Systems Engineering BSE, Computer Science BS or Industrial Engineering BSE student; CIS 300 (or CSE 310 or IEE 305) with C or better |
| CSE | 466 | Computer Systems Security | Countermeasures to attacks to computer systems from miscreants (or hackers) and basic topics of cryptography and network security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |
| CSE | 467 | Data and Information Security | Basic concepts of security and privacy, data and database security, access controls, trust models, watermarking, and private information retrieval. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |
| CSE | 468 | Computer Network Security | Practical network security exposure and hands-on experience about basic concepts, case studies, and useful tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 469 | Computer and Network Forensics | Identification, extraction, documentation, interpretation, and preservation of computer media for evidentiary purposes, file system forensics, and network forensics. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 310 with a C or better OR CSE Graduate student; Credit is allowed for only CSE 469, 494 (Computer and Network Forensics) or 598 (Computer and Network Forensics) |
| CSE | 470 | Computer Graphics | Introduces basic concepts of interactive computer graphics, realistic rendering, and 3-D viewing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS, Geographic Information Science BS, Digital Culture (Media Processing) BA or Computer Systems Engineering BSE student; CSE 310 with C or better; MAT 342 or MAT 343 |

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| CSE | 471 | Introduction to Artificial Intelligence | State space search, heuristic search, games, knowledge representation techniques, expert systems, and automated reasoning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE, Computer Science BS or Geographic Information Science BS student; CSE 240 with C or better; CSE 310 with C or better |
| CSE | 472 | Social Media Mining | Network measures, social network analysis, network models, random graphs, small-world model, power laws, data mining, influence and homophily, information diffusion, epidemics, behavioral analysis, recommendation in social media, community detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite with C or better: CSE 310; IEE 380; MAT 343; Computer Science or Computer Systems Engineering major; Credit is allowed for only CSE 472 or 494 (Social Media Mining) |
| CSE | 476 | Introduction to Natural Language Processing | Principles of computational linguistics, formal syntax, and semantics, as applied to the design of software with natural (human) language I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 310 with C or better |
| CSE | 477 | Introduction to Computer-Aided Geometric Design | Introduces basic concepts of 3-D computer geometry, including curves, surfaces, meshes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; MAT 343 (or 342) |
| CSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Pre-requisite: Junior or Senior standing |
| CSE | 485 | Computer Science Capstone Project I | First course in capstone sequence for computer science majors emphasizing development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS major; Senior standing; CSE 310 with C or better; CSE 340 with C or better; CSE 360 with C or better; Credit is allowed for only CSE 423, 461 or 485 |
| CSE | 486 | Computer Science Capstone Project II | Second course in capstone sequence for computer science majors continuing the development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS student; Senior standing; CSE 355 and 485 with C or better |
| CSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Pre-requisite: CSE 310 with C or better |
| CSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-7 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; Minimum cumulative GPA of 2.50 or Graduate Engineering student |
| CSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-3 | | |
| CSE | 509 | Digital Video Processing | Concepts of digital video compression, video analysis, video indexing, browsing and retrieval, video transmission over networks, video processors, MPEG 1, 2, 4, and 7 standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 510 | Database Management System Implementation | Implementation of database systems. Data storage, indexing, querying, and retrieval. Query optimization and execution, concurrency control, and transaction management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 511 | Semi-Structured Data Management | Addresses the data management issues for semi-structured data, which are commonly found in Web applications. Covers techniques on modeling, storing, querying and searching data without schemas, with optional confidence, and/or provenance information. Requires knowledge on relational databases and programming skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 512 | Distributed Database Systems | Distributed database design, query processing, and transaction processing. Distributed database architectures and interoperability. Emerging technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 515 | Multimedia and Web Databases | Data models for multimedia and Web data; query processing and optimization for inexact retrieval; advanced indexing, clustering, and search techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 520 | Computer Architecture II | Computer architecture description languages, computer arithmetic, memory-hierarchy design, parallel, vector, multiprocessors, and input/output. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 522 | Real-Time Embedded Systems | Development of real-time embedded systems, scheduling algorithms, embedded software structures, real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science, Computer Engineering, Master of Engineering or Engineering Science (Software Engineering) Graduate student |
| CSE | 530 | Embedded Operating System Internals | Investigating Linux source including: memory management, kernel synchronization and driver design topics. Designing, coding, testing, and evaluating embedded operating system software in a Linux environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 531 | Distributed and Multiprocessor Operating Systems | Distributed systems architecture, remote file access, message-based systems, object-based systems, client/server paradigms, distributed algorithms, replication and consistency, and multiprocessor operating systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 534 | Advanced Computer Networks | Advanced network protocols and infrastructure, applications of high-performance networks to distributed systems, high-performance computing and multimedia domains, special features of networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 535 | Mobile Computing | Mobile networking, mobile information access, adaptive applications, energy-aware systems, location-aware computing, mobile security and privacy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |

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| CSE | 536 | Advanced Operating Systems | Protection and file systems. Communication, processes, synchronization, naming, fault tolerance, security, data replication, and coherence in distributed systems. Real-time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 539 | Applied Cryptography | Uses cryptography for secure protocols over networked systems, including signatures, certificates, timestamps, electrons, digital cash, and other multiparty coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 543 | Information Assurance and Security | Comprehensive understanding of information assurance and security problems with the solutions as well as hands-on experiences about applying these solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 545 | Software Security | Theories and tools for software security, including secure design, threat analysis and modeling, security testing and coding. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 548 | Advanced Computer Network Security | Comprehensive understanding of network security and corresponding solutions, including cryptography, access control, secure Web transactions, e-mail security, and viruses. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 550 | Combinatorial Algorithms and Intractability | Combinatorial algorithms, nondeterministic algorithms, classes P and NP, NP-hard and NP-complete problems, and intractability. Design techniques for fast combinatorial algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 552 | Randomized and Approximation Algorithms | Introduces two important areas of algorithm design for graduate students. A randomized algorithm is allowed to rely on the outcome of a random experiment in deciding on its next step. In many applications, randomized algorithms are simpler than any deterministic algorithms known, but in several cases, they are in fact more powerful or more efficient than any deterministic algorithms. Covers basic paradigms for randomized algorithm design and analysis, as well as for derandomization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 555 | Theory of Computation | Rigorous treatment of regular languages, context-free languages, Turing machines and decidability, reducibility, and other advanced topics in computability theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 556 | Game Theory with Applications to Networks | Strategic conflict as matrix games, notions of equilibrium, definition and existence of Nash equilibrium, zero-sum games, extensive-form games, Bayes Nash equilibrium, potential games, routing games, algorithmic game theory, computation of Nash equilibrium, incentives and pricing in communication networks, application of game theory in wireless networks. Knowledge of calculus, discrete mathematics, probability theory and algorithms is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student. Credit is allowed for only CSE 556 or CSE 591 (Game Theory with Applications to Networks) |
| CSE | 561 | Modeling and Simulation Theory and Application | Modeling theories, simulation protocols, object-oriented modeling, model design, simulation analysis, network-based systems, discrete-event modeling, continuous modeling, hybrid modeling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 563 | Software Requirements and Specification | Examines the definitional stage of software development: analysis of specification representations, formal methods, and techniques emphasizing important application issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 564 | Software Design | Examines software design issues and techniques. Includes a survey of design representations and a comparison of design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 565 | Software Verification, Validation, and Testing | Test planning, requirements-based and code-based testing techniques, tools, reliability models, and statistical testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 566 | Software Project, Process, and Quality Management | Project management, risk management, configuration management, quality management, and simulated project management experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 569 | Fundamentals of Statistical Learning and Pattern Recognition | Concepts of statistical pattern recognition, Bayesian decision theory, parameter estimation, discriminant analysis, basics of artificial neural networks, basics of data clustering. Knowledge of college-level calculus, linear algebra, basic probability theory and proficiency in computer programming is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering or Computer Science Graduate student. Credit is allowed for only CSE 569 or 591 (Statistical Learning and Pattern Recognition) |
| CSE | 570 | Advanced Computer Graphics I | Hidden surface algorithms, lighting models, and shading techniques. User interface design. Animation techniques. Fractals and stochastic models. Raster algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 571 | Artificial Intelligence | Definitions of intelligence, computer problem solving, game playing, pattern recognition, theorem proving, and semantic information processing; evolutionary systems; heuristic programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 572 | Data Mining | Advanced data mining techniques: classification, clustering, association, preprocessing; performance evaluation; information assurance. Web mining, security and privacy issues, and other applications. Students must have a solid background in database management systems, search, learning, and statistics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 573 | Advanced Computer Graphics II | Modeling of natural phenomena: terrain, clouds, fire, water, and trees. Particle systems, deformation of solids, antialiasing, and volume visualization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 574 | Planning and Learning Methods in AI | Reasoning about time and action, plan synthesis and execution, improving planning performance, applications to manufacturing intelligent agents. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 575 | Statistical Machine Learning | Spectral clustering, regression, classification, semi-supervised learning, feature reduction, manifold learning, ranking, kernel learning and multitask learning. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering MCS, MS, or PhD major. Credit is allowed for only CSE 575 or 591 (Machine Learning) |

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| CSE | 576 | Topics in Natural Language Processing | Comparative parsing strategies, scoping and reference problems, nonfirst-order logical semantic representations, and discourse structure. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 577 | Advanced Geometric Modeling I | Advanced concepts of geometric modeling: rectangular and triangular surfaces, triangle meshes, Voronoi diagrams, discrete and continuous shape measures, volumes and volume visualization. Students must have a solid background in linear algebra, calculus, and basic 3D graphics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 578 | Advanced Geometric Modeling II | Advanced concepts of geometric modeling: Bezier curves, B-spline curves, blossoming, polygons, geometric algorithms, shape analysis. May be repeated for credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 579 | Knowledge Representation and Reasoning | Covers knowledge representation and reasoning algorithms in artificial intelligence, shows how they can be used in practice, and provides an overview of current research trends. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering Graduate student. Credit is allowed for only CSE 579 or 591 (Knowledge, Represent/Reasoning) |
| CSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CSM | 201 | Introduction to Community Sports | Examines the role of community sports at the local, national and international levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CSM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| CSM | 305 | Survey of Sport Facility Design | Surveys design of sport facilities with a focus on meeting program needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Community Sports Management major; CRD 210 (or NLM/PRM/TDM 210) with C or better, MAT 142 or higher; minimum 2.50 cumulative GPA; minimum 45 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CSM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| CSM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| CSM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| CSM | 407 | Ethics and Legal Issues in Sports | Comprehensive look at ethical decision making from many perspectives in the sports environment. Presents legal issues as they relate to history, present society and future trends. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: CSM 201 |
| CSM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| CSM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |
| CSM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |
| CST | 100 | Object-Oriented Software Development | Introduces problem solving with a state-of-the-art programming language. Expressions, statements, basic control flow and methods. Data, data aggregation and usage. Uses a structured personal software development process to implement solutions representative of common computing applications. Uses development kits for some course activities. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| CST | 111 | Introduction to Game Development | Introduces fundamental video game development concepts and techniques prevalent in video game industry. Provides opportunity to understand these techniques and learn how they are applied during the production of a video game. Includes game design, game production, asset production, game programming, game art and animation. Hands-on experience by writing 2D game prototypes while learning different game mechanics and features. Intended to serve as an introduction into the game production cycle, breaking down the complex process of game creation into a simple step-by-step program. No programming knowledge is required; however, some degree of computer proficiency is desirable. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Credit is allowed for only CST 111 or 194 (Intro to Game Development) |
| CST | 150 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Pre-requisite: CST 100, EGR 101 or SER 101 (or be co-enrolled in CST 100); MAT 117 or higher. Credit is allowed for only CST 150 or SER 232 |
| CST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| CST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 200 | Core Data Structures with Object Oriented Programming | Design, implementation and use of core data structures; object-oriented software development; design, analysis and programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100 (or 211) with C or better; Credit is allowed for only ACO 102, CSE 205 or CST 200 |
| CST | 201 | Object-Oriented Software Development II Lab | Hands-on development and programming using objects, inheritance, and polymorphism; GUI programming; introduction to software engineering concepts, UML tools. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre/Co-requisite: CST 200 |
| CST | 211 | Intermediate Game Development | Introduces multiplayer games, artificial intelligence, and tile-based worlds using a scripted programming environment. Uses game scripting to automate, repeat, change, anticipate, and govern the action of games from a simple word game to a complicated multiplayer game like pool. Introduces gaming terminology and basic genres, enhancements such as fine-tuning graphics, creating optimal soundtracks, and using high score lists, as well as creating and modifying online chat files. Introduces video game scripting to the student. Scripting skills are essential in every aspect of game development and are used by designers, programmers, and artists in the game industry. Students learn the core scripting skills required to implement game features and apply those to enhance the prototype created in the introductory course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 111; Credit is allowed for only CST 211 or 294 (Intermediate Game Development) |
| CST | 220 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| CST | 230 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |

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| CST | 250 | Microcomputer Architecture and Programming | Microcomputer architecture, instruction set, assembly language programming and debugging, I/O considerations, memory interface, peripherals and busses, exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100; CST 150 or SER 232 |
| CST | 251 | Microcomputer Architecture and Programming Laboratory | Hands-on experience in assembly language programming and debugging. May be taken concurrently with, or subsequent to, CST 250. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: EGR 101 (or CST 100), or CST 150; Pre/Co-requisite: CST 250 |
| CST | 256 | C Programming for Engineering Technology | Applied and practical problem solving using the C programming language. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| CST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 315 | Software Enterprise I: Tools and Process | Introduces tools and techniques used in software enterprise/development, including coding, design, testing, configuration management, and personal process management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 230 or SER 222 |
| CST | 316 | Software Enterprise II: Construction and Transition | Best practices in software construction in the context of a team project, including refactoring, defensive programming, unit testing, and configuration and release management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 315 |
| CST | 335 | Applications of Computer Theory | Introduces and applies formal language theory and automata, Turing machines, decidability, undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 230; MAT 243 |
| CST | 350 | Digital Design with Hardware Description Languages | Digital system design using Verilog. Structural and behavioral modeling. Design examples include finite-state machines, RISC CPUs, and UARTs. Requires design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 4 | | Prerequisite(s): CST 150 or SER 232 or Fulton Polytechnic School graduate student |
| CST | 359 | Internet Networking Protocol | Computer networking for application, transmission control and network layers using the Internet protocols as a model; reliability and security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250 or IFT 201 or BAS major |
| CST | 383 | Shell and Script Programming with UNIX | UNIX operating system programming of shells, environment and 4th-generation languages and tools, such as sed, awk, perl, grep, make. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100 or BAS student |
| CST | 386 | Operating Systems Principles | Fundamentals of operating systems, process management, scheduling and synchronization techniques, memory and file management, protection and security issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 222) and CST 250 (or CST 251) |
| CST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 401 | Digital Signal Processing for Multimedia | Applies DSP techniques to multimedia. Digital filter analysis and design. Time and frequency techniques. Computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| CST | 415 | Software Enterprise III: Inception and Elaboration | Third course in the four-course enterprise sequence. Students perform inception (project launch) and elaboration (requirements analysis) activities in project teams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | L | Pre-requisite: CST 316; ENG 101, ENG 105 or 107 |
| CST | 416 | Software Enterprise IV: Project and Process Management | Project-centric course focusing on applying software process, project management, and technical leadership. Final course in the software enterprise sequence. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 415; ENG 102, 105, 108 or 112 |
| CST | 420 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| CST | 425 | Server Software Programming | Design and implementation of software servers, threaded socket servers, servers for distributed Web-based applications; security for the Web. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 427 | Distributed Object Systems | Distributed applications with Web services, NET, RMI, CORBA; concepts and frameworks for managing, registering, locating, and securing distributed object applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 428 | Web-Client User Interface Programming | Client-server model for window interfaces. Java Swing, Applets, mark-up and scripting languages; Web tools and related technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 433 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management), or Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| CST | 441 | Software Development for Mobile Devices | Mobile computing using Java's K, Virtual Machine, MIDP for wireless applications; user interfaces, persistent data storage, and networking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 450 | Computer Architecture | Price/performance analysis, instruction set design, RISC/CISC, processor design and implementation, pipelining, instruction-level parallelism, memory hierarchy, storage and I/O systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250 |
| CST | 452 | Digital Systems Synthesis with Hardware Description Languages | Uses a hardware description language to synthesize components of computers and digital systems as FPGAs. Emphasizes optimization and satisfying performance constraints of system scale designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 350 |
| CST | 456 | Embedded Interfaces: Sensors and Actuators | Electromechanical sensors and electrical actuators, analog-to-digital and digital-to-analog conversion, hardware and software interfaces for embedded systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 150 (or SER 232) and CST 200 |
| CST | 457 | Foundations of Embedded Systems Programming | Programming concepts for embedded systems. Interfacing and controlling LEDs, LCDs, keypads, buttons, serial communication. Embedded OS concepts, timers, interrupts, device drivers. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or EGR 102); CST 230; CST 250 |

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| CST | 458 | Digital Computer Networks | Network hardware and software, topologies, protocols, OSI model, LANs, WANs, Internet; basic concepts of packet switching, routing, error controlling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250; CST 251 or IFT 201 or BAS student |
| CST | 460 | Computer Graphics with Applications | Hands-on course introduces 2D and 3D computer graphics programming and some of the applications related to the topic in a studio-style learning environment. Uses data structures for computer graphics, and a graphics API such as OpenGL taught with industry examples. Intended for upper-division (senior) students in CST programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 100 (or EGR 102); CST 230 (or SER 221) |
| CST | 473 | Digital/Data Communications | Signals, distortion, noise, and error detection/correction. Transmission and systems design. Interface techniques and standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 4 | | Pre-requisite: CST 250; CST 251 |
| CST | 481 | Information System Security | Implementation, development, and analysis of computer and network security policies, legal ramifications and development and analysis of risk management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 359, CST 458 or IFT 201 |
| CST | 482 | Network Forensics | Use and creation of advanced network forensics tools: intrusion detection and prevention, honeynets, traffic routing and management, and data reduction and grafting tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 481 |
| CST | 483 | Cyber Security Capstone Project | Applies security techniques to a real-world situation. Development of security policy, risk solutions, and incident response facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 2 | | Pre-requisite: BAS student; CST 481 or CST 489; Pre/Co-requisite: CST 482 |
| CST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| CST | 486 | Embedded C Programming | Programming concepts for embedded systems. Interfacing and controlling LED, LCD, keypads, buttons. Embedded OS concepts. Timers and interrupts. Serial communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): undergraduate or nondegree Engineering student; CST 350 and 383 with C or better; OR SER 222 with C or better; minimum 2.25 GPA OR graduate Engineering student |
| CST | 488 | Systems Administration of UNIX | UNIX administration of system and user services using command line and GUI tools. System security and forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 386 or IFT 201; Pre/Co-requisite: CST 383 |
| CST | 489 | Network Administration with TCP/IP | Configuration and installation of networks: addressing, routing, naming, and LAN and MAN services. Network security checking, monitoring, and basic forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: BAS student; CST 359 or CST 458; Pre/Co-requisite: CST 383 |
| CST | 490 | Reading and Conference | | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 496 | Ethics and Professionalism in Computing | Studies major social and ethical issues in computing, including impact of computing on society, ethical behavior, and social responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: Junior or Senior standing |
| CST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| CTI | 101 | Success in Technology & Innovation | Helps students acquire skills for success and to engage with the university, campus, and community. Covers academic integrity and student success. | N | SEM | N | GNA | Ira A. Fulton Engineering | Polytechnic School | 1 | | |
| CTI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-4 | | |
| CTI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-4 | | |
| CTI | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-6 | | |
| CTI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-4 | | |
| CTI | 412 | MAKE Your Ideas Grow | Students implement real solutions by developing and testing their ideas and improving them through experimentation and actual practice, under guidance of faculty. Gains understanding of the role different disciplines can play in society and the broader issues related to serving customer and community needs. Open to students of all disciplines and majors who have an interest in making an idea become real. | N | LEL | N | GNA | Ira A. Fulton Engineering | Polytechnic School | 1 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only CTI 412 or 494 (Make Your Idea Grow) |
| CTI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Polytechnic School | 1-12 | | |
| CTI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Polytechnic School | 1-6 | | |
| CTI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Polytechnic School | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| CTI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-4 | | |
| CTI | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-6 | | Prerequisite(s): Barrett Honors student |
| CTI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Polytechnic School | 1-3 | | |
| CTI | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Polytechnic School | 1-4 | | |
| DAH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DAH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DAH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DAH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 495 | Theory and Methods of Dance Research | Examines modes of inquiry, data gathering techniques, data analysis and representation, prospectus design, and presentation style for dance research studies. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| DAH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DAH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAN | 130 | Dance | Introduces styles and forms of dance: ballet, modern, jazz, tap, ballroom, ethnic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DAN | 351 | Methods of Teaching Ballet | Analysis and acquisition of teaching techniques and materials for ballet. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| DAN | 352 | Dance Education Theory | Motivation; learning; assessment; historical, cultural, and social constructs; outreach; service; advocacy; curriculum development in dance education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Dance major |
| DAN | 380 | Performance Studies Practicum | Focus on developing rehearsal skills and achieving performance excellence through the preparation of three completed works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| DAN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAN | 435 | Technique and Theory of Ballet | Study of professional advanced ballet technique with emphasis on preparation for performance. 4 hours weekly. May be repeated for credit. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA student |
| DAN | 445 | Laban Movement Analysis | Theory and practice of Laban movement analysis and Bartenieff fundamentals through movement investigation, observation, notation, and analysis. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student |

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| DAN | 471 | Dance Arizona Repertory Theatre | Preprofessional modern dance company, emphasizing outreach and performance. Opportunity to work with guest artists and community schools and organizations. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAN | 472 | Concert Dance | Extensive preparation of repertory or new works created by experienced choreographers. Simulates dance company experience, culminating in performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DAN | 496 | Senior Dance Education Capstone | Original research that integrates dance and education. Includes production of written document and public presentation. Fall semester must be completed before spring registration. Must be repeated for a total of 4 semester hours. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DAN 350 with C or better; DAN 352 with C or better; DAN 354 with C or better; DAN 356 with C or better |
| DAN | 510 | Dance Production | Theory of costuming, lighting, makeup, scenery, and sound as related to dance performance. May be repeated once for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAN | 551 | Graduate Dance Pedagogy: Ballet | Advanced analysis of teaching techniques for ballet. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 701 | Macroeconomic Policies in a Global Environment | Provides the framework for policy makers when facing macroeconomic situations, the tools in analyzing the costs and benefits of alternative policy options, and the knowledge necessary for making recommendations to policy makers and business leaders. Students learn knowledge and skills about global economy and risks that help facilitate dissertation research. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 702 | Global Financial Systems: Markets and Institutions | Examines the overall architecture of the global financial system, its major components, and their functions in the macro economy. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 703 | Global Financial Systems-Institutional Investing | A large fraction of investors around the world invest in securities markets indirectly, viz. through mutual funds or separate accounts established with investment managers, whether they be endowments, foundations, pension plans or sovereign funds. Exposes students to the global marketplace for such portfolios. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 704 | Design of Knowledge Base Organizations for Performance and Innovation | Covers various issues on executive compensation and management pay structure with a particular emphasis on aligning business strategy, organization design to the choice of performance standards and pay structure for managers. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |

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| DBA | 705 | Global Corporate Strategy | Demonstrates that decisions affecting the international expansion of a firm are neither obvious nor totally determined by the technological or economic forces generally associated with globalization. Addresses the most transcendental decisions that multinational firms face in the course of conducting business across borders. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 706 | Strategic Visioning, Leadership and Change Management | Addresses the interrelationship among organizational culture, leadership, and the management of change in order to promote continuous improvement of the organization's market position. Addresses the role of strategy, how strategy explicates vision, and how effective strategies are created. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 707 | Risk Management : An Enterprise Perspective | Provides an understanding of the broad set of risks an enterprise faces; their origin, characteristics and potential impact on business; and how they can be efficiently managed at the enterprise level. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 708 | Challenges of Corporate Finance and Governance | Helps students understand the link between finance and corporate strategies, as well as examine ways to establish and reform the practices of corporate governance in China. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 709 | Finance and Law | Helps students learn about the philosophy of law, various legal systems, the relationships among law and economics and finance, the practice of law in a global context. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 710 | Financial Decision Making | Provides a framework of conceptual knowledge and enables students to understand what the literature on financial theory is trying to do and how it all fits together. Also provides an in-depth experience with the subject of finance and equips students for their future development as a practicing executive. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 711 | Finanacial Innovations | Focuses on how financial innovations influence the evolution of finance. Discusses many of the major financial innovations in recent history, the forces driving these innovations, their impact on the financial system and the real economy and the risks they bring. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 712 | Advanced Topics in Global Economy and Finance: Domestic Module | Addresses many critical topics facing China today on its quest of globalization, the need for transforming its economic structure, capital markets and corporate control, and its monetary policies. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 713 | Advanced Topics in Strategy and Management: Domestic | Reexamines many popular best practices through panel discussion and speaker series on why some of those practices failed to work in China, and how firms have creatively modified their strategic undertakings to fit its environment. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 714 | Current Trends in Global Economy, Finance and Management: US Module | Provides first-hand experiences on the world class practices by the multinationals and interactions with the leading experts on the emerging topics of interest on globalization, financial regulations, and managerial innovations. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 715 | Current Trends in Global Economy, Finance and Management: Europe Module | Provides direct exposure to European markets, firms, and institutions, their history, current status, and future directions. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 721 | Research Seminar I- Research in Action | Provides needed skills for research and thesis work. 1. Focuses mainly on research design and fundamental statistical/survey and field study methods. The key objective is to provide students with the needed required skills and concepts of the scientific method, the philosophy of science, and research design with an emphasis to solve specific problems. This course is spread out during the first year of the program. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 722 | Research Seminar II-Research in Action II | Focuses on the process of research "in actions" through faculty presentation and research workshops. Faculty with diverse research interest and methodologies present up-to-date research works. Through interaction, students gain first-hand experience on learning the process of how faculty, with diverse research interests, are able to identify specific research topic, choosing the right research methodology to address their research questions. The presentation and research workshop are scheduled at the beginning of the second year and throughout the entire year, allowing the program to leverage faculty availability during their course delivery while enabling students to seek out their faculty mentors for future dissertation engagement. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 723 | Research Seminar III- Research in Action III | Provides students with opportunities to present their own research proposal/ thesis ideas while allowing the participating faculty and fellow students to offer constructive comments. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| DBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 100 | Introduction to Dance | Overview of dance as a cultural and performative practice, exploring history and theory, philosophy, and movement practices, with reference to key pioneers in the field from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 110 | Argentine Tango I | Introduces basic movement elements, explores various contexts shaping Argentine Tango, and emphasizes social tango with exposure to vals and milonga timing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 111 | Raqs Sharqi I | Familiarize students with the ancient art of Middle Eastern dance. Covers posture, styling, basic body isolations, rhythm patterns, footwork, as well as the social significance and history of the dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 112 | Capoeira I | Introduces the Afro-Brazilian martial art and movement form capoeira. Molds elements of self-defense, dance, music, song, language, culture and philosophy into the course. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 113 | Dances of Africa I | Introduces basic elements of West and Central African dance styles, including the traditional rhythms and cultural context. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 114 | Dances of India I | Introduces Indian folk dances with an emphasis on the history and various movement elements of an ancient South Indian classical dance form, known as Bharata Natyam. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 115 | Yoga I | Introduces a basic physical and philosophical understanding of yoga. Designed by a certified Yoga instructor. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 115 or 194 (Yoga I) |
| DCE | 116 | T'ai Chi Chuan I | Introduces an ancient Chinese internal martial art form. The structure includes the beginner level of Tai Chi Chuan theory and movement practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 117 | Feldenkrais I | The Feldenkrais method is an approach to enhance awareness of the body, improve functional actions, and expand one's repertoire of movements. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 118 | Yoga/Pilates | Provides a basic physical and philosophical understanding of yoga and Pilates mat practices. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 120 | Modern Dance I | Introduces modern dance and its basic principles, including alignment, core muscular strength, and spatial exploration. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 121 | Ballet I | Introduces principles of ballet and development of basic technical skills, including dynamic alignment, functional rotation, and musicality. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 122 | Jazz I | Provides students with beginning-level technique class in different jazz styles. Focuses on alignment, technique, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 123 | Hip Hop I | Equips student with understanding of hip hop dance history, culture and music through studio work on various hip-hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 124 | Latin/Swing/Ballroom I | Introduces major Latin and ballroom dances and focuses on a system of elements that are found in all partnership dances, including movement components, rhythmic patterns, dance positions, and unique characteristics used to better define each dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 125 | Latin/Salsa I | Introduces Latin dancing. Instruction focuses on salsa, cha-cha, merengue, and rumba. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 126 | Country-Western | Initiates the student into the rhythm two-step, progressive two-step, night club two-step, country cha-cha, country waltz, triple swing and a multitude of line dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 130 | First-Year Movement Practices I | Introduces diverse somatic movement principles and practices through exploration of movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major |
| DCE | 131 | First-Year Movement Practices II | Modular structure enables a series of short intensive studies including movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance student; DCE 130 with C or better |
| DCE | 133 | Urban Movement Practices I | Designed as an introduction to dance, history, culture, and music in urban movement styles. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, BA Performance and Movement, BIS-Dance, Dance minor; Credit is allowed for only DCE 133, 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) |
| DCE | 134 | Postmodern Contemporary I | Introduces postmodern contemporary dance technique and theory. Designed to enhance the dancer's technical and artistic proficiency by using movement that is athletically challenging, nuanced, and rhythmically complex. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 135 | Contemporary Ballet I | Introduces contemporary view of ballet technique and theory with attention to enhancing student's dynamic alignment. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |

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| DCE | 136 | Somatic Practices I | Survey course offers a practical and theoretical introduction to some of the major somatic practices evolving out of the 20th century. Guest practitioners and teachers of various embodied practices share theory, practice and context. Explores movement and the integration of the body and mind through a variety of somatic lenses (e.g., the Alexander Technique, Authentic Movement, and experiential anatomy). | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 136 or 194 (Intro Movement Language Sources) |
| DCE | 137 | African and Diaspora Movement Practices I | Foundational course in the African and the Diaspora movement practices curriculum. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA, BIS-Dance concentration or Dance minor; Credit is allowed for only DCE 137, 194 (Mvt Practice: Africa/Diaspora), 294 (Mvt Practice: Africa/Diaspora) or 494 (African & Diaspora Mvt Prac) |
| DCE | 160 | First-Year Creative Practices I | Explores creativity and creative processes with reference to some key historical practices and influential artists. Seeks to encourage and develop students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 161 | First-Year Creative Practices II | Explores creativity and creative processes with reference to some key historical practices and influential artists. Encourage and develops students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 160 with C or better |
| DCE | 170 | First-Year Seminar I | Orientation to the university learning environment and profession of dance with emphasis on developing tools and processes for reflection and critical thinking. | N | LEC | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major |
| DCE | 171 | First-Year Seminar II | Continuation of First-Year Seminar I. Focuses on orientation to the larger field of contemporary dance practice with an emphasis on developing tools and processes for reflection, synthesis, and critical thinking. Requires participation in School of Dance "Dance Matters." | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance majors |
| DCE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 201 | Dance, Culture, and Global Contexts | Introduces the study of dance as culture in diverse global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 202 | Dance in U.S. Popular Culture | Investigates vital cultural heritages that have shaped dance in U.S. American popular culture from 20th century to the present. Emphasizes dance as a producer of social space and cultural identity as well as a reflection of diverse social realities and dynamics of power. Following required reading and videos, the course surveys time periods of dance from the late 1800s through the 20th century to the present day. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Credit is allowed for only DCE 202 or 294 (Dance in US Popular Culture) |
| DCE | 203 | Walk this Way | Addresses walking as a key component in movement studies and further brings the study of bodily movements center stage as a means to address the dynamic between self and society. Designed for nonmajors. Not eligible for majors credit. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only DCE 203 or 294 (Walk this Way) |
| DCE | 210 | Argentine Tango II | Builds upon concepts, figures, and elements of the Argentine Tango introduced in level one. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 110 or DAN/DCE 194 (Argentine Tango I) |
| DCE | 211 | Raqs Sharqi II | Focuses on refining beginning technique, advanced movements, layering and musical interpretation. Uses choreography and improvisation to encourage mind-body awareness. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 111 or DAN 194 (Raqs Sharqi I) |
| DCE | 216 | T'ai Chi Ch'uan II | Intermediate-level study of the ancient Chinese martial art of rounded, fluid, balanced movements. Teaches the sets of long form Yang style of Tai Chi Ch'uan in a slow and relaxed manner. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 116 or DAN 194 (T'ai Chi Ch'uan I) |
| DCE | 220 | Modern Dance II | Explores modern dance practices, including somatic techniques, stylistic versatility, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DAN 130 (Modern II) or DCE 220 |
| DCE | 221 | Ballet II | Explores contemporary and classical ballet practices, focusing on whole body integration and performance strategies. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 222 | Jazz II | Explores intermediate level of jazz dance techniques. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 122 or DAN 130 (Jazz I) |
| DCE | 223 | Hip Hop II | Intermediate-level class that provides the knowledge of hip hop dance history, culture and music through studio work on various hip hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 123 or DAN 194 (Hip Hop I) |
| DCE | 224 | Latin/Swing/Ballroom II | Continues development of level one Latin/Swing/Ballroom dances to prepare student to have command of the complex rhythmic patterns and figures used in major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 124 or DAN 194 (Latin/Swing/Ballroom I) |
| DCE | 225 | Latin/Salsa II | Reviews and reinforces the basics introduced in Latin/Salsa I and builds upon more complicated concepts and figures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 125 or DAN 194 (Latin/Salsa I) |
| DCE | 230 | Second-Year Movement Practices I | Investigates selected movement forms in the second-year movement practices. New movement forms include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwondo, aikido, wushu, LMA, yoga, or somatic bodywork. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 131 with C or better |

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| DCE | 231 | Second-Year Movement Practices II | This course is set up in two modules. In module one, students will investigate a movement form, include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwondo, aikido, wushu, LMA, yoga, or somatic bodywork. Module two expands the practice of rhythmic awareness through exploration and investigation of the close relation between thought and act, the kinesthetic and the verbal, the text and the beat, as well as the breath and the word. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 230 with C or better |
| DCE | 233 | Urban Movement Practices II | A practical and theoretical investigation of the urban movement forms and practices developed over recent years in urban centers around the world. Addresses the evolution of hip hop/urban movement dance through the study of House style. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, Performance and Movement major, BIS-Dance Concentration or Dance minor; DCE 123 or 133 or 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) with C or better |
| DCE | 234 | Postmodern Contemporary II | Investigation and practices of postmodern contemporary dance technique. Development of movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 235 | Contemporary Ballet II | Explores the possibilities of contemporary ballet technique and theory with awareness of student's individual anatomical differences. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 236 | Somatic Practices II | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Baranietff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| DCE | 237 | African and Diaspora Movement Practices II | Provides historical and cultural contexts for West, Central, and South African and Post-African (Diasporic) movement practices. Offers students tools and experiences to identify specific dance cultural knowledge and demonstrate/embodiment techniques representing that cultural knowledge. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA, BIS-Dance concentration or Dance minor; DCE 137, 194 or 494 (African & Diaspora Movement Practices) or DCE 113 with C or better; Credit is allowed for only DCE 237 or 294 (African & Diaspora Movement Practices) |
| DCE | 240 | Media for Dance | Computer applications for human movement modeling, digital video design and creation, sound composition, and the incorporation of multimedia design elements into online environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | |
| DCE | 260 | Second-Year Creative Practices I | Explores concepts introduced in the first year of creative practice and further expands into the themes of analysis and investigation. Year two experience involves the investigation of learning to compose and construct choreographic material through individual, collaborative, improvisational, and group exploration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 161 with C or better |
| DCE | 261 | Second-Year Creative Practices II | Continues developing students' awareness of their own creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 260 with C or better |
| DCE | 262 | Rhythmic Theory for Dance I | Elements of music, music structures, and their relationship to dance. Emphasis on rhythmic analysis and dance accompaniment. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 263 | Rhythmic Theory for Dance II | Continuation of DAN 221 with an emphasis on small group/movement projects in relation to musical time and structure. CD-ROM work included. Students with rhythmic theory transfer credit may meet the enrollment requirements by passing a proficiency exam. Please contact the instructor of the course for more information. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA student |
| DCE | 270 | Second-Year Seminar I | Continues developing tools and processes for reflection and critical thinking by identifying individual goals and objectives related to the students' current and future academic and professional careers | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 171 |
| DCE | 271 | Second-Year Seminar II | Provides basic understanding of costume design, sound production, and interactive performance for dance. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 270 with a Y |
| DCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 300 | Moving Histories | In-depth study of the history of Western dance in Europe and America. Students learn about various ways of conducting research into dance history, including interviewing, researching using primary resources and performing scholarship. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 101, 105 or 107 with C or better |
| DCE | 301 | Meaning in Motion | Critical inquiry into the nature of dance through the lens of dance theory. Covers philosophical and theoretical issues raised by the study of dance in relation to specific historical and global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better |
| DCE | 303 | The Body Condition(ed) | Examines contemporary practices of conditioning the body from a triangulation of perspectives: physical, social, and experiential. Enhances the ability to obtain a holistic understanding of how the self/social dynamic operates within the context of body conditioning. Designed for Non-Majors. Not Eligible for Dance Major Requirements. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | SB | Pre/Co-requisite: ENG 102, ENG 105 or ENG 108 |
| DCE | 324 | Latin/Swing/Balroom III | Refines dances learned in the intermediate level of Latin and ballroom dances, including foxtrot, waltz, salsa, cha cha, rumba, samba, west coast swing, bolero, tango, and swing. Prepares students to have a more advanced command of the complex rhythms and figures used in the major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 224 or DAN 294 (Latin/Swing/Balroom II) |

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| DCE | 325 | Latin/Salsa III | Refines dances learned in the intermediate level of major Latin dances, including salsa, cha cha, rumba, meringue, bachata, and samba. Prepares students to have a more advanced command of the complex rhythms and figures used in the major Latin dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 225 or DAN 294 (Latin/Salsa II) |
| DCE | 330 | Third-Year Movement Practices I | Focuses on the application of diverse movement forms and somatic studies in a range of performance contexts. These contexts may include live and mediated performance, community-based projects, pedagogy, analysis of movement forms in relation to musical compositions or the creation of new movement languages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major; DCE 231 |
| DCE | 331 | Third-Year Movement Practices II | Student will focus on the integration of diverse movement forms and somatic practices, as well as developing an in-depth understanding of a range of performance contexts practically and theoretically. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 330 with C or better |
| DCE | 333 | Urban Movement Practices III | A practical and theoretical integration of the urban movement forms that have been investigated and practiced in the urban movement practices curriculum. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: DCE 233 with C or better |
| DCE | 334 | Postmodern Contemporary III | Integrates dance theory and practices of postmodern contemporary dance technique. Refines movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 335 | Contemporary Ballet III | Expansion of student's technical skills and theoretical knowledge through utilization of a hybridized ballet movement vocabulary. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 336 | Somatic Practices III | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): minimum 45 hours |
| DCE | 337 | African and Diaspora Movement Practices III | Integrates historical and cultural contexts for west, central, and south African and post-African (diasporic) movement practices. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Dance major, BIS- Dance concentration or Dance minor; DCE 237, 294 (Movement Practices of Africa & Diaspora) or 494 (African & Diaspora Movement Practices) with C or better |
| DCE | 350 | Dance in the Classroom: Learning Through Movement | Explores theories of learning, thought development, and knowledge construction through aesthetic movement experiences. Students look to theories from the fields of aesthetics, phenomenology (study of lived experiences), somatics (study of the soma or body/mind), sociology and epistemology (theory of knowledge) to understand how the intertwined relationship of human thought development and movement patterning can affect children's learning and development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Junior standing |
| DCE | 354 | Creative Approaches to Teaching Dance I | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student |
| DCE | 356 | Creative Approaches to Teaching Dance II | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major |
| DCE | 360 | Third-Year Creative Practices I | Provides an orientation to the field of community dance practice. Students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 261 with C or better |
| DCE | 361 | Third-Year Creative Practices II | Historical survey of music and compositional elements relative to dance. Emphasis on analysis of choreography from a musical standpoint. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 360 with C or better |
| DCE | 370 | Third-Year Seminar I | Provides an orientation to the field of community dance practice. Over two consecutive semesters, students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 271 with a Y |
| DCE | 371 | Third-Year Seminar II | Hones skills in collaborative approaches, teaching, leading, and facilitation through partnerships with community organizations in the Phoenix metropolitan area. Students study community dance practices covering a range of creative process and community building tools that can be used in diverse settings. Applies research methods, such as data collection, analysis, and reflection, to measure the efficacy of community arts practices. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 370 with a Y. |
| DCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 402 | Ethnography of Dance Practices | Examines the field of ethnochoreology, ethnographic methods, and interpretive research practices. Develops critical writing, thinking, and viewing skills for comparative dance study. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | (L or HU) & G | Pre-requisite: DCE 201 with C or better; ENG 102, 105, or ENG 108 with C or better |

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| DCE | 404 | Dance and Ethics | Examines ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Junior standing; ENG 102, ENG 105 or ENG 108 with C or better |
| DCE | 405 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): Junior standing; Dance BFA major or nonmajor with DCE 303 (or DCE 394 The Body Conditioned) with C or better. Credit is allowed for only DAN 494 (Rhetorical Moves) or DCE 405 |
| DCE | 434 | Technique and Theory of Modern Dance | Preparation in the performance and comprehension of professional-level modern dance technique. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student |
| DCE | 438 | Dance Theatre Performance/Production | Performance or technical theatre work in designated dance productions. 3 hours a week per semester hour. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance BFA, Dance minor or BIS Dance concentration |
| DCE | 460 | Transition Project I | Original choreography for group performance with analysis and critique of problems encountered in production. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA student |
| DCE | 461 | Transition Project II | Original research that integrates dance and a related field of interest. Includes production of written document and public presentation. Fall semester must be completed before spring registration. May be repeated for a total of 4 semester hours. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance students; DCE 460 with C or better |
| DCE | 470 | Fourth-Year Seminar | Explores and investigates the larger world of dance as it pertains to transitioning out of the university environment into professional lives. Discussion revolves around career opportunities, options and finding potential work synergies that will parlay into meaningful and exciting lives. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: BFA Dance major; DCE 371; Credit is allowed for only DCE 470 or 494 (4th-Yr Seminar) |
| DCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| DCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | L | |
| DCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 501 | Philosophy of Dance | Analyzes traditional and contemporary theories of dance with regard to issues of expression, form, and meaning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 502 | Cultural Concepts of Dance | Examines the close connections among culture, dance, and movement through writings in cultural theory, dance ethnology, and philosophy. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 504 | Dance and Ethics | Examination of ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 505 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts graduate students |

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| DCE | 530 | Graduate Movement Practices I | The four-semester sequence of graduate movement practices are a sequence of graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Addresses the integrated practices and theoretical underpinnings of Laban/Barthelemy praxis, Body Mind Centering and other somatic practices that are explored within the four-course sequence that facilitate movement exploration, movement functioning, movement performance and movement creation as well as performance and social theory constructs. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 531 | Graduate Movement Practices 2 | The series of graduate movement practices courses are a sequence of two graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Classroom experiences are approached from theoretically grounded and contextualized perspectives that address through practice current somatic and epistemological thinking. The overarching frameworks for the first and fourth modules are designed as "bookends" for introducing, contextualizing, and synthesizing classroom experiences and concepts explored within the two-course sequence. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 534 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for first-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 535 | Contemporary Ballet | Graduate-level theoretical study and movement practice of contemporary ballet for contemporary dancers. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 536 | Somatic Practices | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Barthelemy Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. Integrated lecture/lab. Prerequisite(s): degree- or nondegree-seeking graduate. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only DCE 536 or DCE 598 (Movement Language Sources) or (Somatic Practices) |
| DCE | 537 | African and Diaspora Movement Practices | Investigates and integrates historical and cultural contexts for West, Central, and South African and Post-African (diasporic) movement practices. Engages movement and physical articulation as tools to examine specific dance cultural knowledge and demonstrate/embody techniques representing that cultural knowledge. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance major; Credit is allowed for only DCE 537 or DCE 598 (African Diaspora Movement Practices) |
| DCE | 538 | Dance Theatre | Performance in specially choreographed dance productions. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 540 | Issues in Media for Dance | Introduces desktop multimedia as it relates to dance creation, production, education, and research. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 543 | Sound Design for Dance | Audio mixing for analog/digital recording and editing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors |
| DCE | 554 | Graduate Dance Pedagogy | Provides both the theoretical basis and practical application of principles for teaching contemporary dance disciplines in a postsecondary setting. Includes discussion, co-teaching and individual teaching projects and sessions, practical application of course readings, and guest speakers. Both dance and discussion of ideas in each class session. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 560 | Graduate Creative Practices I | Artistic research through the practices of improvisation, choreographic choice making, and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 561 | Graduate Creative Practices II | Explores a variety of contemplative practices designed to cultivate awareness and serve as stimuli for generating choreography and creative approaches in interdisciplinary collaborations. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student; DCE 560 |
| DCE | 563 | Rhythmic Awareness | This course focuses on the kinesthetic aspects of weight, space, and time. It is opportunity for individual exploration as well as an ensemble experience, a chance to come together as a group through the communicative nature of sound, movement, and visual patterns. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 570 | Graduate First-Year Seminar I | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. Seminar. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance Graduate student; Credit is allowed for only DCE 570 or DCE 591 (1st Year Graduate Seminar) |
| DCE | 571 | Graduate First-Yr Seminar II | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |

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| DCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 634 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for second-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 660 | Graduate Creative Practices III | Artistic research through the practices of choreographic choice making, exploration, and experimentation of integrated environments and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 661 | Graduate Creative Practices IV | Culmination of a four-semester Creative Practices sequence, focusing on articulating individual creative practices and identifying the needs of each student relative to their Applied Projects. Students are also responsible for understanding the content and requirements for the selected modules of this course. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 670 | Graduate Second-Year Seminar I | Part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, presents opportunities for dialoguing about topics significant to fulfilling degree requirements and promotes success in the dance program as well as to facilitate transition into the professional world. Reflection is a key component of the School of Dance curriculum; develops ability and skills in analysis, but more importantly builds awareness of intuitive and habitual patterns of response to new stimuli. The Seminar is a key moment each week to develop a community of inquiry amongst peers. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student. Credit is allowed for only DCE 591 (2nd Yr Seminar) or DCE 670 |
| DCE | 671 | Graduate Second-Year Seminar II | The Second-Year Graduate Seminar is part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| DCI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 451 | Design Research and Educational Gaming Practicum | Principles of design research as applied to educational games. Includes implementation of a design research project. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: RDG 440 with C or better; EDT 329 with C or better |

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| DCI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| DCI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| DCI | 510 | Teacher as Researcher | Introduces teacher research as a new research genre; offers teachers guidance on planning and conducting research on their practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 511 | Establishing Effective Teaching Practice | Helps beginning teachers establish and strengthen best practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 512 | Developing Strategies for Teaching Practice | Helps beginning teachers refine management strategies and instructional methods. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 520 | Teaching Standards Applied to Professional Practice | Develops teacher skills and self-reflective practices to assess instruction and document and achieve professional growth in teaching standards. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 521 | Reflective Practice in Teaching Standards | Teachers apply reflective practices to develop professional presentation portfolios. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 527 | Performance Assessment: Classroom Applications | Develops knowledge and skills of evaluating and assessing learning in middle and secondary schools. Introduces methods to assess cognitive, metacognitive, and affective domains. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 531 | Analyzing and Planning for Professional Growth through Mentoring | Refines strategies for assessing instruction and provides collegial feedback. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: COE 501 or DCI 510 with B or better |
| DCI | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 597 | Applied Research and Reflection | The dual purpose of the project is to synthesize learning from multiple areas of scholarship on teaching and learning, and to reflect on the content and process of the master's degree program. Culminating product includes a reflective paper with a corresponding project, such as a literature review, curricular model, technology product, or other project as agreed upon by the student and the student's advisor. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |

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| DCI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 701 | Curriculum Theory and Practice | Curriculum theory and practice as a field of study. Its current orientations and applications, modes of inquiry, and community of scholars and practitioners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 702 | Interdisciplinary Research Seminar | Core research course for students in the interdisciplinary PhD in Curriculum and Instruction program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 703 | Research in Teacher Development and Leadership | Examines research in teacher education and development from preservice through in-service. Students participate in the review of research related to broad themes within the recent literature. Strands/themes of investigation include a brief review of the history of teacher education, teacher development, professional development and teacher leadership, teacher evaluation, qualitative and quantitative research in teacher education, reform in teacher education, including recent policies and politics and other issues. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 704 | Adult Learning Theory and Practice | Explores the multiple dimensions of learning in adulthood, including the social contexts of learning, and cognitive and developmental aspects of learning. Focuses on the experience and practice of adult learning, and examines the various theories attempting to explain how adults learn. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 705 | Teacher Leadership Theory and Professional Practice | Teacher leaders analyze leadership skills as they reflect on their own practice and professional development experience. They process knowledge of how to effectively promote positive practices among teachers at varied stages in their careers. Teacher leaders are involved in scholarly inquiry and discourse by means of leadership institutes, peer collaboration, reflective questioning and individual research. Teacher leaders also develop the perspective of the teacher as researcher as they read and critically evaluate published research related to teacher leadership in professional and academic literature. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DNP | 600 | Research Methods | Course on research methods in a specific discipline. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 601 | Theoretical Foundations for Advance Practice Nursing | Examines philosophical foundations of advanced nursing practice by analyzing interrelationships among theory, philosophy, practice, and research. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 602 | Evaluating Research for Practice | Provides opportunities for graduate students to develop the knowledge and skills to critically analyze scientific literature and research for application to practice. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 603 | Evaluating and Applying Evidence in Healthcare Outcomes | Examines the role of inquiry and innovation in scientific, theoretical, and practical underpinnings of healthcare improvement. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Graduate Nursing Program student |
| DNP | 604 | Advanced Human Pathophysiology Across Lifespan | Core course focuses on human pathophysiology and concepts of genetics for advance practice nursing. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: DNP Advanced Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 605 | Advanced Health Assessment Across Lifespan | Advanced health assessment skills, including history-taking strategies and physical, functional, developmental, and psychosocial assessment. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 606 | Advanced Neonatal Health Assessment | Students develop advanced assessment skills related to the neonate/infant, including history taking. Includes physical, developmental, behavioral, cultural and genetic assessment. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP 659; DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) major; Co-requisite: DNP 651 |
| DNP | 607 | Advanced Human Pathophysiology Women's Health | Didactic course for women's health nurse practitioner students focuses on applying concepts of human pathophysiology and genetics learned in the core pathophysiology course. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Women's Health NP); Co-Req: DNP 604 |

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| DNP | 608 | Advanced Pharmacotherapeutics Across Lifespan | For advanced practice nurses, expands theoretical and evidence-based knowledge and promotes synthesis of pharmacotherapeutic concepts and principles across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 609 | Advanced Practice Nursing Role I | Focuses on the historical and contemporary social and political influences on the role of the DNP-prepared advanced practice nurse. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: Doctor of Nursing Practice major |
| DNP | 610 | Advanced Practice Nursing Role II | Focuses on the ethical and professional role of the DNP, negotiation strategies, and preparation of a professional portfolio. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP 609 with B or better |
| DNP | 611 | Advanced Health Assessment of Women Lab/Practicum | Skill-based course of advanced health assessment skills, including history-taking strategies and the physical, functional, developmental, psychosocial, and comprehensive health assessment of women across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 605 |
| DNP | 612 | Applied Pharmacotherapeutics for Women | Focuses on the application of knowledge of pharmacological principles in the treatment of diseases and promotion of health for women. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 608 |
| DNP | 613 | Women's Health Promotion I | Didactic course focuses on theories of health behavior, health promotion, disease prevention and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 614 |
| DNP | 614 | Women's Health Practicum I | Clinical assessment and education of women across the lifespan for the purposes of health promotion and disease prevention. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 613 |
| DNP | 615 | Management of Common Problems in Women's Health | Focuses on management of nursing care for high-risk perinatal women and women with common health problems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 616 |
| DNP | 616 | Advanced Women's Health Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 615 |
| DNP | 617 | Management of Complex and Chronic Disease in Women | Didactic course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health status across the lifespan and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 618 |
| DNP | 618 | Advanced Women's Health Practicum III | Clinical course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health status across the lifespan and patient education. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student. Co-requisite: DNP 617 |
| DNP | 620 | Advanced Human Pathophysiology Adult | Didactic course for adult nurse practitioner students focuses on applying concepts of human pathophysiology and genetics learned in the core pathophysiology course. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Nurse Practitioner); Co-requisite: DNP 604 |
| DNP | 621 | Health Assessment Skills | Skill-based course focuses on advanced clinical skills including suturing, splinting, x-ray, ECG and advanced lab interpretation. | N | LEL | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): DNP 605 |
| DNP | 622 | Applied Pharmacotherapeutics for Adults/Geriatrics | Focuses on the application of knowledge of pharmacological principles in the treatment of diseases and promotion of health for adults and geriatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Nurse Practitioner); Co-requisite: DNP 608 |
| DNP | 623 | Adult-Gerontology Health Promotion | Introduces health promotion and disease prevention for adults across the lifespan emphasizing principles of evidence-based practice in clinical and community settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 624 |
| DNP | 624 | Adult-Gerontology Health Promotion Practicum | Clinical practicum designed to apply principles of evidence-based practice in health promotion and disease prevention in clinical and community settings. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 623 |
| DNP | 625 | Management of Common Health Problems in Adults Across the Lifespan | Includes theory and research that guides the management and maintenance of adults across the lifespan with common health alterations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 626 |
| DNP | 626 | Management of Common Health Problems/Adults Across the Lifespan Practicum | Diagnosis, management, and application of advanced knowledge and skills in caring for adults across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 625 |
| DNP | 627 | Management of Complex Health Alterations in Adults Across the Lifespan | Focuses on application of EBP in care of adults of all ages with complex health alterations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 628 |
| DNP | 628 | Management of Adults Across the Lifespan w/Complex Health Alterations Practicum | Clinical practicum designed to apply principles of evidence-based practice in primary care management of adults across the lifespan with complex health alterations. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 627 |
| DNP | 629 | Research for Geriatric Practice | Gaining knowledge and skills in critical appraisal and synthesis of evidence to guide best practice in gerontology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only DNP 629 or NUR 629. |
| DNP | 630 | Advanced Human Pathophysiology Family | Didactic course for family nurse practitioner students focuses on applying concepts of human pathophysiology and genetics learned in the core pathophysiology course. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 604 |
| DNP | 631 | Advanced Health Assessment for Family Lab/Practicum | Skill-based course of advanced health assessment skills, including history-taking strategies and the physical, functional, developmental, psychosocial, and comprehensive health assessment across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 605 |
| DNP | 632 | Applied Pharmacotherapeutics for the Family | Applies evidence-based pharmacotherapeutic principles to disease treatment and health promotion and maintenance for family nurse practitioners. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 608 |
| DNP | 633 | Family Health Promotion | Focuses on concepts and strategies to promote, manage, and maintain health of children, adults, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major. Co-requisite: DNP 634 |
| DNP | 634 | Family Health Promotion Practicum | Clinical application of theories, concepts, and principles in the care of children. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major. Co-requisite: DNP 633 |
| DNP | 635 | Management of Common Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of acute and common health problems in family practice across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 636 |

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| DNP | 636 | Management of Common Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of acute and common problems in family practice across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 635 |
| DNP | 637 | Management of Complex and Chronic Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of complex and chronic problems in family practice across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 638 |
| DNP | 638 | Management of Complex and Chronic Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of complex and chronic problems in family practice across the life span for Family Nurse Practitioner role specialty. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 637 |
| DNP | 640 | Advanced Human Pathophysiology Pediatrics | Didactic course for pediatric nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 641 | Advanced Health Assessment Pediatrics | Skills-based advanced health assessment course that includes history-taking strategies and physical, functional, developmental, psychosocial health assessment of children (birth-21). | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 642 | Applied Pharmacotherapeutics for Pediatrics | Applies evidence-based pharmacotherapeutic principles to disease treatment and health promotion and maintenance for pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 643 | Developmentally Based Care of the Well Child | Offers information for theory-based developmental care of well children. Includes anticipatory guidance for parents and/or children/teens. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 644 |
| DNP | 644 | Well Child Advanced Practicum | Clinical application of theories, concepts and principles as they relate to the developmentally based care of the well child. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 643 |
| DNP | 645 | Management of Common Problems in Pediatric Primary Care | Provides health promotion and disease prevention strategies for the advanced nursing care of all children and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 646 |
| DNP | 646 | Management of Common Problems in Pediatric Primary Care Practicum | Facilitates development of advanced clinical skills in the assessment and management of child health, health surveillance and promotion. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 645 |
| DNP | 647 | Management of Complex and Chronic Health Problems in Pediatric Primary Care | Third pediatric didactic course focuses on assessment and management of childhood complex and chronic health problems and special health conditions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 648 |
| DNP | 648 | Management of Complex & Chronic Problems Pediatric Primary Care Practicum | Clinical course assists students in developing advanced clinical skills in decision making with chronically ill or special needs pediatric patients. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 647 |
| DNP | 650 | Advanced Human Pathophysiology Neonates | Didactic course for neonatal nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 651 | Advanced Health Assessment of Neonates | Skill-based course focuses on advanced health assessment skills, including history-taking strategies and the physical, functional, genetic, developmental, and psychosocial/cultural health assessment of neonates. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 652 | Applied Pharmacotherapeutics for Neonates | Focuses on the application of knowledge of pharmacological principles in the treatment of diseases and promotion of health for neonates and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 653 | Advanced Development and Family Health Promotion: Neonatal Theory I | Concepts, theories, interventions, and research related to the promotion, management, and maintenance of physical, behavioral, and developmental needs of at-risk newborns and infants and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 654 |
| DNP | 654 | Neonatal Practicum I | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 653 |
| DNP | 655 | Management of Common Neonatal Problems | Proactive neonatal theory course focusing on the concepts, theories, and research related to acute and chronic health deviations of neonates and infants. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) Co-requisite: DNP 656 |
| DNP | 656 | Neonatal Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 655 |
| DNP | 657 | Management of Complex Problems in Neonates | Examines the application of knowledge of complex, multi-system alterations in neonatal health from a theoretical and research perspective in preparation for clinical practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 658 | Neonatal Practicum III: Management of Complex Problems in Neonates | Develops and applies advanced neonatal assessment, clinical decision making, and management skills to complex health alterations in at-risk neonates to include cultural, ethical, legal, and advocacy issues. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 657 |
| DNP | 659 | Embryology and Genetics | Prepares advanced practice nurses to use embryology, genetics, and physiology concepts within the nursing process in the care of pediatric and neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal, Pediatric or Family Nurse Practitioner) |
| DNP | 660 | Advanced Neuropsychopathology Lifespan | Manifestations of altered neurophysiology and psychopathology over the lifespan. Uses evidence-based support for theoretical views of psychiatric disorders to analyze the relationships of neuropsychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Child and Adolescent Mental Health Intervention or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 662 | Advanced Mental Health Assessment Across the Lifespan Lab/Practicum | Focuses on integration of knowledge and development of skills in assessment of psychiatric disorders occurring in children, adolescents, and adults. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 663 | Mental Health Promotion in Adults | Analyzes issues, theories, and research in restoration and promotion of mental health. Emphasizes developing conceptual framework for psychiatric nursing. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner); Co-requisite: DNP 664 |
| DNP | 664 | Adult Psychiatric Mental Health Practicum I | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner); Co-requisite: DNP 663 |
| DNP | 665 | Management of Common Mental Health Problems in Adults | Focuses on development of theoretical basis for intervention and a knowledge base for collaboration and consultation in the mental health area. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner); Corequisite: DNP 666 |
| DNP | 666 | Adult Psychiatric Mental Health Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner); Co-requisite: DNP 665 |
| DNP | 667 | Management of Complex and Chronic Mental Health Problems in Adults | Focuses on modalities of evidence-based treatment with adolescents and adults with complex and/or chronic psychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner); Co-requisite: DNP 668 |

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| DNP | 668 | Psychiatric Mental Health Practicum III | Clinical experiences in the assessment and evidence-based management of the most complex and chronic adolescent and adult mental health disorders. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner). Co-requisite: DNP 667 |
| DNP | 671 | Advanced Mental Health Assessment Across the Lifespan | Focuses on comprehensive mental health assessment of psychiatric disorders occurring in children, adolescents, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 672 | Psychopharmacology Across the Lifespan | Focuses on evidence-based use of medications for mental health disorders across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 673 | Mental Health Promotion Across the Lifespan | Focuses on evidence-based interventions to promote mental health across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 674 |
| DNP | 674 | Mental Health Promotion Across the Lifespan Practicum | Clinical experiences to become skilled in assessment and evidence-based individual intervention of mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 673 |
| DNP | 675 | Management of Common Mental Health Disorders Across the Lifespan | Emphasizes the assessment and evidence-based management of common mental health disorders across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner Co-requisite: DNP 676 |
| DNP | 676 | Management of Common Mental Health Disorders Across the Lifespan Practicum | Clinical experiences necessary to become skilled in the assessment and evidence-based management of the most common mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 673 |
| DNP | 677 | Management of Complex & Chronic Mental Health Disorders Across the Lifespan | Focuses on modalities of evidence-based treatment with children, adolescents, adults, and families with complex and/or chronic psychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 678 |
| DNP | 678 | Management of Complex & Chronic MH Disorders Across the Lifespan Practicum | Clinical experiences in the assessment and evidence-based management of the most complex and chronic mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 677 |
| DNP | 679 | Biostatistics: Principles of Statistical Inference | Examines principles of statistical inference and their application to the analysis and interpretation of epidemiological, psychosocial, medical, nursing, and healthcare data. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| DNP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 681 | Advanced Health Assessment of Older Adults Lab/Practicum | Skill-based course focused on advanced health assessment skills specific to older adults, including history-taking strategies, physical, functional, developmental, and psychosocial health assessment. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 682 | Geriatric Health Promotion | Examines theoretical perspectives in aging and cultural and contextual approaches for health promotion in older adults. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 685 | Geriatric Health Promotion Practicum | Diagnosis, management and application of advanced knowledge and skills related to assessment, screening, and health promotion of older adults in a variety of settings. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Graduate student |
| DNP | 686 | Management of Common Health Problems in Geriatrics | Provides theoretical foundation for advanced geriatric healthcare focusing on the epidemiology of aging and the effects of senescence on cognition and organ systems. Emphasizes the core concepts of aging, including health management and end of life care. Uses theory building approaches for applying health management process and outcomes to clinical practice and policy. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing and Healthcare Innovation PhD or DNP student. Pre/Co-requisite: DNP 682 or NUR 682. credit is allowed for only DNP or NUR 686 |
| DNP | 687 | Geriatric Health Management Practicum | Diagnosis, management and application of advanced knowledge and skills for primary care of older adults with acute and age-associated conditions. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Graduate student |
| DNP | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 689 | Geriatric Chronic Disease and Syndrome Management Practicum | Diagnosis, management and application of advanced knowledge and skills for comprehensive primary care and care of older adults with geriatric chronic diseases and syndromes. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Graduate student |
| DNP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| DNP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| DNP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 696 | Advanced Human Pathophysiology Older Adults | Didactic course for gerontological/geriatric nurse practitioner students focuses on applying concepts of human pathophysiology and genetics learned in the core pathophysiology course. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP Advanced Nursing Practice (Geriatric Nurse Practitioner); Co-requisite: DNP 604 |
| DNP | 703 | Innovation in Communication-Scholarly and Professional Writing | Provides a review of principles of scholarly and professional writing, plagiarism and APA 6th edition format. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: Doctor of Nursing Practice major |

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| DNP | 704 | Principles of Evidenced-Based Care in Advanced Practice | Foundational course focuses on the evidence-based process and understanding of evidence-based practice principles assist advanced practice nurses and other healthcare professionals in clinical decision making in order to provide best care. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 705 | Healthcare Outcomes Management | Outcomes management methodology supports implementation of evidence-based practice and measurement of both patient and healthcare system outcomes attributed to adoption of best practices. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student; DNP 704 |
| DNP | 706 | Implementing Sustainable Change toward Evidence-Based Practice | Facilitates student learning about striving for and evaluating sustainable change that hinges on active improvement of practices through implementing evidence-based practice (EBP). Students engage strategies designed to facilitate advanced practice nurses' leadership of this change. Students analyze the success of their evidence-based applied clinical project that is implemented in their clinical residency course. Students evaluate the impact of their doctorally prepared evidence-based advanced practice nurse role on shifting culture to best practice. Students explore the use of adult learning, ethical, and mentorship principles to facilitate understanding of EBP in their workplace. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice major; DNP 704; DNP 705; Co-requisite: DNP 712 |
| DNP | 707 | Disseminating Evidence to Advance Best Practice in Healthcare and Health Policy | Focuses on methods for dissemination of evidence to advance best practice within local, regional, and/or national settings, as well as advancement of EBP in health policy and the media. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Doctor of Nursing Practice major; DNP 704, 705 or 706. Corequisite(s): DNP 712 |
| DNP | 708 | Systems Thinking in a Complex Healthcare Environment | Studies basic and advanced systems principles as they relate innovation to the American healthcare system. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 709 | Individual and Innovation Leadership in Healthcare Practice | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 710 | Innovation in Communication and Information Systems in Nursing and Health | Examines principles of effective communication and information systems with a focus on evaluating and using emerging technologies as they relate to nursing and health care. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Doctor of Nursing Practice major |
| DNP | 711 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy with emphasis on strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 712 | Clinical Residency and Management | Demonstrates DNP competencies through portfolio documentation of clinical learning experiences and implementation of the DNP Evidence-Based Clinical Applied Project. Doctoral students submit the DNP Portfolio in partial fulfillment of the degree. | N | PRA | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Doctor of Nursing Practice student |
| DNP | 713 | Analysis of Organizational Cultures in Healthcare | Analyzes culture, organizational implications and relationships to change and innovation in healthcare. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 714 | Professional Relationships in Healthcare | Analyzes professional relationships within healthcare organizations and evidence-based strategies to improve communication, coordination, and collaboration. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 715 | Dynamics and Principles of Information in Healthcare | Analyzes and applies multiple sources of information for healthcare leaders across the continuum of evidence including research, evidence-based practice, translational research, improvement science, and quality improvement. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 716 | Leadership of Innovation in Healthcare | Analyzes leadership theories in the creation of complex healthcare system innovation. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice concentrations major |
| DNP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 100 | ASU Design Experience | Covers ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | REC | N | GNA | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): BS, BSD or BSLA Design School major. Credit is allowed for only DSC 100 or 194 (ASU Design Experience) |
| DSC | 101 | Design Awareness | Surveys cultural, global, and historical context for the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| DSC | 180 | Athena Design Success | Facilitates academic success for first-year College of Design students in the Athena program through developmental, educational, and professional experiences. | N | REC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | |
| DSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| DSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 236 | Introduction to Computer Modeling | Computers in design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Pre-requisite: Industrial Design student; Passed Milestone |
| DSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| DSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |

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| DSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| DSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| DSC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design or PhD in Environmental Design & Planning student |
| DSC | 501 | Qualitative Research in Design | Theory and application of qualitative research. Emphasizes using ethnography to identify and specify innovative concepts and strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Industrial Design or Master of Science in Design major |
| DSC | 520 | Contemporary Design Issues | Issues influencing contemporary design such as sustainability, globalization, education, gender, collaboration and emotion. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 525 | Design Methodologies | Practical exercises and studies in problem-solving strategies; problem definition and supporting theory for the designer. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 558 | Daylighting | Daylighting as a design determinant; concepts, techniques, methodology, experiments, and case studies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Herberger Institute of Design and the Arts graduate student |
| DSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design student |
| DSC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD or Design (Inter Design) MSD student |
| DSC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Master of Industrial Design, Master of Interior Architecture, Master of Science in Design, or Master of Visual Communication Design major |
| DSC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EA | 555 | Sch-Plant-Plan-Main | | Y | LEC | Y | CNV | Institute & Grad Sch Education | Division of Curriculum and Instruction | 3 | | |

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| EAC | 426 | Professional Knowledge in Early Childhood Education | Explores issues related to professional knowledge, including disciplinary instruction and the impact of the community on students' learning. | N | SEM | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| EAC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| ECD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECD | 211 | The Developing Child: Theory into Practice, Prenatal-Grade 3 | Examines process of physical, social, emotional, cognitive, language, and literacy development of young children; includes observation, practical application, fieldwork. May be repeated once for credit. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| ECD | 220 | Introduction to Nutrition, Health and Safety | Emphasizes providing proper nutrition, promoting a safe but challenging learning environment, and becoming knowledgeable of a child's health status. Also covers practical applications for assisting young children to develop good habits and attitudes and to assume lifelong responsibility for their own well-being. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| ECD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 301 | Technology, Media, and Community-Based Education for Young Children | Examines technology, media, toys, and community-based educational opportunities to support the education of three- to eight-year-old children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 302 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 312 | Social/Emotional Foundations of Learning | Foundations of early social development and evidence-based practices for promoting social-emotional development; young children's understanding, interactions, and relationships to the social world. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 313 | Technology in Early Childhood Education | Evaluates technology and technological learning tools for early childhood classrooms; integrates technology and its tools into students' learning. Lecture, discussion, active participation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 315 | Classroom Organization and Guidance of Young Children | Theories and strategies to guide children's development toward becoming self governing; typical and atypical behaviors; implementing age-appropriate classroom management techniques that foster individual, social, and academic competence. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 316 | Teacher Research: Studying Children in Context | Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 321 | Emerging Language and Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 323 | Building Home, School, and Community Partnerships | Knowledge and skills to facilitate positive and continuous family-school partnerships; family background, social context, family involvement, and current research on family-school interaction and academic success. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 324 | Social Studies and Creative Arts Curriculum, Instruction and Assessment | Social studies and creative arts standards, curriculum, and instructional and assessment strategies in an integrated social studies and creative expression curriculum for children birth through grade 3. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 341 | Administration/Evaluation of EC Programs | Administration and evaluation of early childhood programs. Emphasizes planning and evaluation; regulations; health, nutrition, and safety; operations, budgeting, and supervision of personnel. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 355 | Accommodating Instruction in Early Childhood Education | Identifying and accommodating learners with special needs, including classroom adaptations in instruction and assessment, for pre-K-3 classroom environments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 396 | Clinical Experience: K-3 Setting | Provides opportunities to engage as a teacher and learner in a K-3 classroom. Emphasizes focused observation; co-planning with a placement teacher and co-teaching lesson to whole groups, small groups, and individual students. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 397 | Clinical Experience: Preschool | Instruction, observation, and management of small groups and the whole class. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 402 | Integrated Curriculum and Assessment: Math and Science | Emphasizes developmentally appropriate educational strategies and instructional techniques in teaching mathematics and science to children in preschool through 3rd grade, within an integrated curriculum approach. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 403 | Educational Environments: Preschool/Kindergarten/Primary Grades | Focuses on interactions between young learners and the physical and social environments encountered in preschool, kindergarten, and primary settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 405 | Practicum in Teaching Reading and Language Arts in Early Childhood | Supervised experience teaching reading and language arts at the preschool, kindergarten, and primary-grade (1-3) levels. Developmentally appropriate strategies to promote young children's speaking, listening, reading, and writing abilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 406 | Assessment: Birth-Grade 3 | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |

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| ECD | 410 | Science Curriculum, Instruction and Assessment | Content, instructional strategies, and assessment in early childhood science; age-appropriate standards; active investigation of science concepts; inquiry and collaborative learning; connections between science and other subject areas. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 415 | Practicum - Literacy Curriculum, Instruction, and Assessment, K-3 | Supervised experience teaching reading and language arts in the primary grades. | N | PRA | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 416 | Social and Educational Policies Affecting Children and Families | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links between policy, educational practice, schools, and family functioning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 418 | Instructional Methods for Young Children: Integrating Digital Media | Develops integrated experiences with children's literature for facilitating development in reading, writing, speaking, and listening. Further develops educational strategies for promoting growth in the social studies and creative arts curriculum, and instructional/assessment strategies for preprimary- and primary-level children, developmentally appropriate methods and strategies for effective instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 470 | Early Childhood Education Student Teaching Seminar | Reflective, experience-based integration of theory and practice; professional development for early childhood teachers. | N | REC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 476 | Integrated Curriculum: Birth-Pre K | Introduction to teaching children birth through pre-K, including classroom organization, curriculum, and professional relationships. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 477 | Student Teaching: Birth to Pre-K | Supervised practicum in a birth to pre-K program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 4-6 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 478 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 479 | Capstone Seminar in Early Childhood Education | Reflective, experience-based integration of theory and practice; professional development for early childhood teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 481 | Issues and Practices in Early Childhood Education | Stakeholder analysis of teacher education experiences applicable to preparation that leads to increased educational opportunity and success for diverse children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ECD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 496 | Field Experience III | Instruction and management of small groups and substantial work with the whole class. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECD | 501 | Interprofessional and Family Collaboration | Explores trends and practices, educationally appropriate instruction and resource materials, methods and strategies in early childhood education. Discusses history of the field, theory, contemporary issues and controversies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 503 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| ECD | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 505 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 520 | Child Guidance and Management: Child, Family, Community, and Culture | Introductory exploration of a variety of techniques for developing a positive classroom environment. Includes overview of several classroom and school management programs and possible effects of implementation. Focuses on observations made during the students' classroom and field experiences. Provides the catalyst for introducing students to the program's professional portfolio requirement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 522 | Developmental Social Experiences in Early Childhood Education | Materials, techniques, aesthetic expression, creative activities, and values in the integrated curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECD | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 527 | Mathematics in Early Childhood Education | Theory and practice in the use of manipulative materials for teaching mathematics to preschool and primary grade children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 541 | Assessment of Young Children | Assessment principles, techniques, and issues related to guiding learning for children birth through eight years. Test construction, interpretation and communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 542 | Systems, Policies, and Program Practices for Infants and Young Children | Analyzes historical, political, social, and legal factors affecting services for infants and young children. Examines critical issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 543 | Issues in the Development of Infants and Young Children | Factors and conditions that affect early development. Strategies for promoting attachment, self-regulation, resilience, adaptation, and coping. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 544 | Play-Based Education in Inclusive Settings | Theories of play and the educational implications of each in an early childhood/elementary inclusive curriculum for best teaching practices. Practical applications for the primary grades of the elementary and preschool setting in inclusive settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 545 | Curricula, Methods, Technology, and Adaptations for Infants and Young Children | Developmentally appropriate practices. Serving young children with diverse abilities in natural, inclusive settings. Emphasizes cognitive development, social competence. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 546 | Communication, Language, and Early Literacy | Early communication development and language acquisition. Facilitating communicative competence and early literacy for infants and young children's diverse abilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 547 | Supporting Motor Development | Early sensorimotor development. Strategies to facilitate the acquisition of motor skills and address the needs of children with motor disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 548 | Childhood Studies and Social and Political Environments | Examines the emergence of interdisciplinary/transdisciplinary childhood studies from historical, social, and political contexts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 3 | | Pre-requisite: Graduate student |
| ECD | 549 | Foundations of Diversity, Human Development, and the Young Child | Historical foundations and theories of child development as examined with a concern for diversity, multidirectional human change, and cultural embeddedness. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 555 | Contemporary Practices in Early Childhood | Trends and practices, instructional and resource materials, and methods and techniques in early childhood education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 565 | Appropriate Instructional Methodologies for Young Children | Surveys appropriate teaching methodologies for young children across the curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 570 | Pre-K Internship | Field experience working with children between the ages of birth-age 4. Required for Arizona Dept. of Education Early Childhood Endorsement and Certification. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 571 | Pre-K Student Teaching | Supervised student teaching in which a student works with children between the ages of birth to age 4. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 4 | | Pre-requisite: Graduate student |
| ECD | 578 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| ECD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 601 | Theories and Issues in Early Childhood Education | Current theories and issues in early childhood education. Presents issues of early childhood best practices, policy, theory, research, and evaluation that are of significance to the early childhood professional. Highlights building on the child development conceptual framework as related to theory and practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student |
| ECD | 733 | Social and Emotional Development | Inquiry into the social and emotional development dynamics in children, such as peer relationships, self-concept, and parenting processes, with implications for teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |

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| ECD | | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| ECN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| ECN | 211 | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 212 | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 213 | Honors Macroeconomics | Introduces modern macroeconomic analysis. Theory of national income, unemployment, inflation, and economic growth and its application to economic policy. Not open to students with credit in ECN 313. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 210, 211, 270 or 271 with C or better |
| ECN | 214 | Honors Microeconomics | Introduces modern microeconomic analysis. Theories of consumer behavior, production, and cost. Output and price determination in a variety of market settings. Not open to students with credit in ECN 314. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 221 | Business Statistics | Methods of statistical description. Applies probability theory and statistical inference in business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | CS | Prerequisite(s): MAT 211 or 271 with C or better |
| ECN | 231 | Honors Business Statistics | Applies statistical methods used in business and economic modeling and research. Emphasizes regression analysis and modeling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | CS | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: Barrett Honors student; Pre/Co-requisite: MAT 210, 211, 270, 271 or 272 with C or better if completed |
| ECN | 303 | Honors Managerial Economics | Develops a basic platform for managerial decision making. Applies basic economic concepts and models to actual business practices. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 214 or 312/314 with C or better |
| ECN | 306 | Survey of International Economics | Surveys international trade issues, commercial policy, trade theory, customs unions, and international monetary topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |
| ECN | 312 | Intermediate Microeconomic Theory | Role of the price system in organizing economic activity under varying degrees of competition. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisite(s): ECN 211 or 213 with C or better; ECN 212 or 214 with C or better; MAT 211, 266 or 271 with C or better |
| ECN | 313 | Intermediate Macroeconomic Theory | Determinants of aggregate levels of employment, output, and income of an economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or ECN 312/314 with C or better. |
| ECN | 315 | Money & Banking | Functions of money. Monetary systems, credit functions, banking practices, and central banking policy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 331 | Economics of the European Economic Union | Examines broad economic policies seeking to influence individuals' decisions, the history of European economic development and policies, as well as institutions and social systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 335 | South Asia and the World Economy | Develops and discusses alternative theories of trade, development, and growth in the context of south Asia and the world economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |
| ECN | 345 | Survey of Environmental and Resource Economics | Economic principles applied to private and public policy decisions involving environmental resources, natural resource management, and policy analyses. Focuses on how economic methods can contribute to making better environmental decisions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better. |
| ECN | 355 | Economics of Healthcare | Uses economic tools and models to discuss and evaluate the American healthcare system. Applies standard concepts in microeconomics, macroeconomics, and public choice economics to the study of the evolution and the current state of the healthcare system and to the study of proposals for change. Focuses on the promise and problems of using economic tools in a historical, ethical, and cultural context to understand the current healthcare system. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213; ECN 212 or 214 and MAT 211 or 271 with C or better. |
| ECN | 360 | Economic Development | Theories of economic growth and development. Role of capital formation, technological innovation, population, and resource development in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 365 | Economics of Russia and Eastern Europe | Origins and analysis of contemporary institutions. Comparative development and differentiation in the 20th century. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 382 | Managerial Economics | Applies economic analysis to managerial decision making. Market analysis in the context of the socio-legal environment. Does not satisfy Economics major requirements. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Not open to Economics or Business majors. Minimum 2.0 ASU cumulative GPA and minimum of 56 total earned hours OR Non-degree student with minimum 2.0 ASU cum GPA OR Graduate student. |
| ECN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 404 | History of Economic Thought | Development of economic doctrines, theories of mercantilism, physiocracy, classicism, neoclassicism, Marxism, and contemporary economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 410 | Applied Regression Analysis and Forecasting | Applies regression techniques to forecasting in business and institutional environments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 413 | Advanced Honors Macroeconomics | Develops and uses various macroeconomic models to evaluate important economic policies. Emphasizes honing students' policy evaluation skills. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 414 | Advanced Honors Microeconomics | Develops and uses various microeconomic models to evaluate important economic issues. Emphasizes the economics of uncertainty and information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 416 | Game Theory and Economic Behavior | Introduces game theory and its application to various economic situations under conditions of complete and incomplete information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |

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| ECN | 421 | Labor Economics | Labor supply and demand, unemployment, determinants of wages, earnings inequality, labor unions and the structure of labor contracts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisites: ECN 214 or 312 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 423 | Economics of Education | Focuses on educational decisions, including individual choices, institutional strategies and government policies. Topics include measuring the costs and returns of education, the relationship between education and inequality, and the role of K-12 and postsecondary institutions in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 or 312 with C or better; Pre- or corequisite(s): ECN 213 or 313; Credit is allowed for only ECN 423 or 494 (Economics of Education) |
| ECN | 425 | Introduction to Econometrics | Elements of regression analysis: estimation, hypothesis tests, prediction. Emphasizes use of econometric results in assessment of economic theories. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 436 | International Trade Theory | Comparative-advantage doctrine, including practices under varying commercial policy approaches. Economic impact of international disequilibrium. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 438 | International Monetary Economics | History, theory, and policy of international monetary economics. Balance of payments and exchange rates. International financial markets, including Eurocurrency markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Prerequisite(s): ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 441 | Public Economics | Public goods, externalities, voting models, public expenditures, taxation, and budget formation with emphasis on the federal government. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-reqs: ECN 214 or ECN 312/314 with C or greater; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 445 | Environmental Economics | Advanced topics in environmental economics with quantitative methods for developing information that is used for environmental policy making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisites: ECN 214 or 312 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313. |
| ECN | 450 | Law and Economics | Economics of the legal system, including analysis of property, contracts, torts, commercial law, and other topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 453 | Industrial Organization and Competition Policy | Development of public policies toward business. Antitrust activity. Economic effects of government policies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 455 | Health Economics | Focuses on health care decisions, including individual and government policies. Topics include demand for and supply of health care, payment for health care, the impact of health care reform and the techniques economists use to evaluate health care interventions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 (or ECN 312) with C or better. Pre- or corequisite(s): ECN 213 (or ECN 313); Credit is allowed for only ECN 455 or 494 (Health Economics) |
| ECN | 470 | Mathematical Economics | Integrates economic analysis and mathematical methods into a comprehensive body of knowledge within contemporary economic theory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 475 | Capstone in Economics | Capstone course integrating several areas of economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | L | Pre-reqs: ECN 213 or 313 with C or better; ECN 214 or ECN 312/314 with C or better; Senior standing. |
| ECN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Minimum 3.0 ASU cum GPA; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Pre-requisites: Barrett Honors W. P. Carey undergraduate student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Pre-requisites: Barrett Honors W. P. Carey BS or BA student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-7 | L | Pre-requisites: ECN 313 and 314 with C or better |
| ECN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| ECN | 501 | Statistics for Managers | Fundamentals of statistical analysis to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 502 | Managerial Economics | Applies microeconomic analysis to managerial decision making in areas of demand, production, cost, and pricing. Evaluates competitive strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 503 | Global Business Environment | Macroeconomic analysis of issues related to economic growth, inflation, interest rates behavior, unemployment, exchange rate determination, and global competitiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 510 | Microeconomic Theory and Applications | Applies economic theory to production, consumer demand, exchange, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 525 | Applied Regression Models | Simple linear regression, multiple regression, indicator variables, and logistic regression. Emphasizes business and economic applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 527 | Categorical Data Analysis | Discrete data analysis in business research. Multidimensional contingency tables and other discrete models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 525 |
| ECN | 530 | Experimental Design | Experimental designs used in business research. Balanced and unbalanced factorial designs, repeated measures designs, and multivariate analysis of variance. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 525 |
| ECN | 535 | Multivariate Methods | Advanced statistical methods used in business research. Multivariate analysis of association and interdependence. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 525 |
| ECN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 712 and 714 with C or better |
| ECN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 711 | Macroeconomic Analysis I | Current theories of output, employment, inflation, and asset prices as well as major aggregates. Introduces dynamic optimization techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 712 | Microeconomic Analysis I | Theory of production, consumer demand, resource use, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 713 | Macroeconomic Analysis II | Focuses on growth theory, dynamic general equilibrium models, monetary theory, open-economy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 714 | Microeconomic Analysis II | General equilibrium, welfare economics, production, and capital theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 715 | Advanced Macroeconomic Analysis | Focuses on current research areas in macroeconomics and monetary theory with emphasis on methods in economic dynamics and numerical techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 with C or better; ECN 713 with C+ or better |
| ECN | 716 | Advanced Economic Theory I | Economic behavior under uncertainty; markets and contracts under asymmetric information; the theory of games with incomplete information and applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 714 with C or better; ECN 712 with C+ or better |
| ECN | 717 | International Macroeconomics | Intertemporal approach to the current account, international business cycles, international risksharing and home bias, models of exchange rate determination, balance of payment crises, sovereign debt and default. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 721 | Labor Economics I | Develops basic theoretical models for analyzing labor market issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 722 | Labor Economics II | Extensions/criticisms of labor market theories. Applications to a variety of policy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 721 with C or better |
| ECN | 725 | Econometrics I | Problems in the formulation of econometric models. Emphasizes estimation, hypothesis testing, and forecast of general linear models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 726 | Econometrics II | Estimation and inference of qualitative and limited dependent variable models as well as general multiple equation models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 725 with C+ or better |
| ECN | 727 | Quantitative Methods in Economics | Generalized method of moment estimation, estimation with censored and truncated samples, nonlinear models, panel-data models, econometrics of nonstationarities. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 736 | International Trade Theory | Theories of comparative advantage and their empirical verification. Theory and political economy of commercial policy. Resource transfers and the role of the multinational corporation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 738 | International Finance | Foreign exchange market, balance of payments, and international financial institutions and arrangements; theory and applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 741 | Public Economics | Economics of collective action, public spending, taxation, and politics. Impact of central governmental activity on resource allocation and income distribution. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey Graduate degree-seeking students only; ECN 712 with B or better; Co-requisite: ECN 714 |

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| ECN | 753 | Industrial Organization | Analyzes structure, conduct, and performance in industrial markets; the economics of organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 760 | Economics of Growth and Development | Economic problems, issues, and policy decisions facing the developing nations of the world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 and 712 with C+ or better; Co-requisite: ECN 713 and 714 |
| ECN | 770 | Mathematics for Economists | Surveys mathematical ideas encountered in economics and econometrics. Topics include measure theory, probability theory, and mathematical statistics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 784 | Internship | | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECN | | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECS | 310 | Foundations in Typical / Atypical Child Development | Examines the process of typical and atypical physical, social, emotional, cognitive, and language development of young children with or at risk for delay. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 312 | Social and Emotional Development of the Young Child | Examines genetic, environmental and biological influences on typical and atypical social and emotional developmental processes through current research, current issues, as well as connections to practice. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): Minimum junior standing |
| ECS | 315 | Classroom Organization and Child Guidance | Develops and implements analysis, intervention, and consultation strategies for effective management of classroom behavior for students with and without disabilities. Age-appropriate techniques addressing individual, social, and academic competence. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 316 | Assessment/Evidence-based Practice | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 321 | Communication, Language Development, and Emergent Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECS | 397 | Practicum in Inclusive Birth-Age 5 Early Childhood Setting | Provides opportunities for students to engage as a teacher and learner in an inclusive birth to age 5 early childhood setting. Emphasizes focused observation, co-planning with a placement teacher, and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2-4 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECS | 411 | Instructional Methodologies for Young Children: STEM | Explores, applies and integrates STEM (Science, Technology, Engineering and Math) content, project-enhanced instructional strategies and assessments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECS | 412 | Mathematics Curriculum, Instruction and Assessment | Focuses on math content, methods, skills, and attitudes to be considered in teaching young children. Examines the theoretical foundation for young children's inquiry and learning. Methods focus on practical application of theory in classroom practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 413 | Literacy Curriculum, Instruction and Assessment | Extends ECD 321; language and literacy development in K-3 classrooms; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 420 | Evaluation and Intervention Strategies for Infants, Toddlers and Preschoolers with Disabilities | Students will learn to screen, assess and provide services to young children with special needs using norm-referenced, criterion-referenced, and formative assessments to determine special education eligibility, plan individualized family service programs, and monitor progress for eligible students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |

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| ECS | 430 | Systems, Policy, and Advocacy in Early Childhood/Special Education | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links among policy, educational practice schools, and family functioning that have a direct impact on both typical and special needs children in early childhood programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECS | 431 | Family, Community and Professional Support Systems | Covers methods and issues in cooperative teaching for special education students in general education classrooms, with an emphasis on collaborative communication skills for working with a variety of school professionals and families. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECS | 478 | Student Teaching in Inclusive Birth- Age 5 Early Childhood Setting | Student teaching in an inclusive birth to age 5 early childhood special education setting. Synthesizes experience in curriculum, instruction, and classroom management. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECT | 479 | Capstone Seminar in ECT | Reflective, experience-based integration of theory and practice; professional development for preschool through grade 3 teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| EDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDA | 501 | Competency/Performance in Educational Administration | Nature of educational administration and the concept of competency as it applies to educational administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 511 | School Law | Interpreting state and federal law and policy in school settings. Includes statutory authority for administrators, liability, constitutional rights, law, and ethics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 512 | Critical Issues in Educational Leadership | Legal and ethical concepts of educational practices in federal and state laws affecting charter and independent schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 514 | Leadership in Curriculum and Assessment | Curriculum and assessment responsibilities of school administrators. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 515 | Administration and Technology in Learning | Provides students with hands-on exposure to technology that assists with school improvement initiatives. | N | LEC | N | OPT | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 521 | Evaluation of Teaching Performance | In-depth analysis of legal basis of teacher appraisal, teacher competency, measurement of teacher performance, and application of performance appraisal systems. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 524 | Theory and Application of Educational Administration | History and development of public school administration in the United States; current organizational patterns for public education at local, intermediate, state, and national levels; current theoretical positions in educational administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 525 | Human Relations and Societal Factors in Education | Interrelations between problems of educational administration and interdisciplinary social sciences. Communications skills, morale, authority, and perception. Concepts from political science, economics, and social-psychology useful to the administrator. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 526 | Instructional Supervision | Administering curriculum improvement, in-service education, evaluating, and improving teaching competence; administrative instructional responsibilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 530 | Instructional Mentoring and Coaching | Explores embedded professional development and coaching support for teachers and grade level teams to strengthen instructional competence, promote high student achievement and improve teacher skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 534 | Concepts of Learner-Centered Leadership | Principles, theories, attributes, and skills related to learner-centered leadership. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 544 | Public School Finance | Measures of ability, efforts, and educational need; capital outlay funding; tax revenues; federal, state, and local financing alternatives; major issues and trends in the financing of public education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 547 | Marketing and Community Relations for Educational Entrepreneurs | Strategic marketing and community relations concepts and their application, formulation, and execution in charter and independent schools and related services. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 548 | School, Family, and Community Connections | Administrative factors of primary importance in developing community involvement in public schools. Emphasizes theory and skill of school system and individual communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EDA | 555 | Educational Facility Planning | School building needs, educational planning for facilities, responsibilities of architects, duties of contractors, and equipping and furnishing of school buildings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 556 | Management and Human Resources for Educational Entrepreneurs | Entrepreneurial leadership and organization theory applied to managing human resources in competitive educational organizations by increasing the effectiveness of decision making. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 557 | Facilities Planning for Educational Entrepreneurs | Legal and practical implications involved in designing or refurbishing charter school facilities to maximize space to facilitate student development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 558 | Financial Planning and Reporting for Educational Entrepreneurs | Financial planning and reporting concepts, requirements, and procedures for charter and independent schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 571 | School Business Management | Purchasing, budgeting, accounting, payroll management, auditing, financial reporting, insurance, and administration of nonteaching personnel and services. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 572 | School Finance and Human Resources | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and school financial affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 573 | Human Resources Administration | Organization for human resources services; development of policy to govern the human resources function and its related processes. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 576 | The School Principalship | Problem and lab approaches used to provide application of administrative activities of elementary and secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 578 | Critical Issues in Educational Leadership | Explores current critical issues in school leadership, including student support and relationships with governmental agencies and the community. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 597 | Applied Research and Reflection | The dual purpose of the project is to synthesize learning from multiple areas of scholarship on teaching and learning, and to reflect on the content and process of the master's degree program. Culminating product includes a reflective paper with a corresponding project, such as a literature review, curricular model, technology product, or other project as agreed upon by the student and the student's advisor. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 611 | Educational Policy and the Law | Emphasizes policy analysis and application of federal and state law to policy evaluation and development in public schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 624 | Organizational Development and Management of Schools | Current organizational patterns for public schools. Emphasizes the organizations, human, and social dimensions on organizations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 634 | Instructional Leadership | Theory, practice, and issues in school change and reform with a focus on leading change efforts at the school site. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 645 | Leadership Development for Education Leaders | Principles, theories, attributes, and skills related to individual leadership development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 675 | Politics of Education | Uses social science theory and research to consider the political context of educational policy making. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 676 | The School Superintendency | Critical examination of the school superintendency and the primary functions of this educational position. Includes the duties, responsibilities, activities, and problems of the school superintendent. Examines the unique leadership role of the school superintendent. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 677 | Foundations of Educational Reform Movements | Historical and contemporary survey of curricular reform movements in the United States with emphasis on equity and social justice issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 679 | Administration of Special Programs in Education | For personnel administering special education and federal programs; responsibilities of principals, supervisors, counselors, and directors for special education and federally funded programs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 685 | Education in Global Contexts | Global perspectives on education in contemporary society with emphasis on social, political, and economic factors that affect access and equity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-6 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 711 | Administrative Leadership | Emphasizes research in leadership; application of research findings to administrative and supervisory functions in educational endeavors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 722 | Administration of Instructional Improvement | Recent research relating to administrative and supervisory responsibilities for the improvement of the educational program. Effective processes by administrators, supervisors, consultants, and coordinators. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 723 | Diversity in Education for School Leaders | Discusses current issues and leadership strategies for meeting the needs of diverse student populations combating inequity and inequality in education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 772 | School District Human Resources and Business Management | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and business affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 773 | The Superintendency and School District Leadership Roles and Responsibilities | Examines management roles and responsibilities of public school district superintendents and other leaders in identifying and addressing critical issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 302 | Assessment and Evaluation in Education | Applies assessment and evaluation principles to education contexts, using a case format. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| EDP | 303 | Human Development | Selected aspects of child and adolescent development. Emphasizes possibilities for influence by teachers and parents. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| EDP | 310 | Educational Psychology for Non-Teachers | Human behavior in educational situations. Individual differences, factors affecting learning, behavioral and cognitive learning, motivation, testing, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | SB | |
| EDP | 311 | Educational Psychology for Future Teachers | Planning and conducting effective instruction based on learning theories and principles. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | SB | Prerequisite(s): Teachers College major, minor or certificate student |
| EDP | 313 | Childhood and Adolescence | Principles underlying total development of pre- and early-adolescent children. Emphasizes physical, intellectual, social, and emotional development with practical implications for teachers. Meets ADE requirement for one course in early adolescent psychology for middle grade endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| EDP | 323 | Professional Development, Learning, and Motivation | Applies educational psychology principles in classrooms; strategies for building classroom community, learner-centered and intentional teaching, and proactive professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| EDP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 454 | Statistical Data Analysis in Education | Role of data analysis in research and decision making. Elements of exploratory data analysis, descriptive indexes, and statistical inference. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | |
| EDP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| EDP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EDP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EDP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| EDP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDP | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 510 | Essentials of Classroom Learning | Theoretical and empirical foundations of learning in the classroom milieu. Critical exposure to research and method in instructional psychology. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 513 | Child Development | Examines problems and achievements experienced by children growing up in a technological society. Emphasizes discovering the child's perspective. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 514 | Psychology of the Adolescent | Cognitive, physical, and social development of adolescents in contemporary society. Impact of family, school, and workplace on adolescent development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 523 | Educational Assessment | Increases teachers' and others' competence in classroom assessment, grading, and testing. Emphasizes integration of curriculum, instruction, and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 530 | Theoretical Issues and Research in Human Development | Psychological theories, research, and methods relevant to human development, emphasizing the relations between early development and later performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 535 | Applied Behavior Analysis | Principles of conditioning as applied to behavior. Current research on the experimental analysis of behavior in educational psychology. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 536 | Physiology of Behavioral Disorders | Critical study of nervous system, brain function for fundamental behaviors, and system dysfunctions in mental/neurological disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 540 | Theoretical Views of Learning | Classical and cognitive theories of learning, plus recent orientations. Illustrative experimental and rational foundations; implications for educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 541 | Motivating Students to Learn | Examines multiple perspectives on motivation and the management of learning environments as bases for reflecting on educational practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 542 | Research Methods in the Learning Sciences | Students read, design, and carry out original research in the learning sciences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-Requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student, EDP 540 with C or better |
| EDP | 544 | Psychology of Reading | Alternate analyses of the reading process; designs and procedures for investigating instructional and noninstructional variables related to reading achievement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 545 | Higher-Order Processes in the Learning Sciences | Examines original research on induction, deduction, analogy and transfer, knowledge representation, and other issues in learning. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 550 | Introduction to Measurement in Education | Nature and types of educational measures. Critiquing and selecting appropriate measuring devices. Constructing measuring devices. Social controversies about tests. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 552 | Multiple Regression and Correlation Methods | Educational applications of regression techniques. Quantitative and qualitative predictors, curvilinear trends, and interactions. Emphasizes analyzing data and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 554 | Analysis-of-Variance Methods | Educational applications of ANOVA techniques. Between- and within-subjects designs, multiple comparisons. Emphasizes using statistical software and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 560 | Individual Intellectual Assessment | Issues in administration and interpretation of individual intelligence tests. Theoretical basis, ethical considerations, and diagnostic use of test results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: School Psychology Ph.D or Counseling Psychology Ph.D |
| EDP | 561 | Lab in Psychological Assessment | Lab experience in administration, scoring, and interpretation of individual intelligence tests. | N | LAB | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Co-enrolled in EDP 560 |
| EDP | 562 | School Psychology: Ethics, Theory, and Practice | Provides information regarding the ethics, history, and theory of current school psychology practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 563 | Consultation and Supervision | Examines consultation and supervision research relevant to school psychology practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 564 | Academic Assessment and Intervention | Skills-building course emphasizing interventions, assessment, and outcome-based educational decisions for students experiencing academic difficulties. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 566 | Advanced Psychoeducational Practice | Develops advanced knowledge and skills in psychoeducational assessment and intervention with an emphasis on case conceptualization and evidence-based methods. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDP 560 and 562 with B or better |
| EDP | 567 | School Psychological Services for Diverse Populations | Examines historical, legal, ethical, and practical issues involved in the delivery of school psychological services to diverse populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 568 | Psychological Assessment and Intervention | Skills-building course emphasizing interventions, assessment, and outcome-based educational decisions for students experiencing emotional and/or behavioral difficulties. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 597 | Applied Research and Reflection | The dual purpose of the project is to synthesize learning from multiple areas of scholarship on teaching and learning, and to reflect on the content and process of the master's degree program. Culminating product includes a reflective paper with a corresponding project, such as a literature review, curricular model, technology product, or other project as agreed upon by the student and the student's advisor. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 651 | Methods and Practices of Qualitative Research | Advanced course for students familiar with theory and extant work. Topics include data collection, analysis, reporting, and an extensive fieldwork project. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: COE 503 with C or better |
| EDP | 652 | Multivariate Procedures for Data Analysis | Educational applications of multivariate methods, including MANOVA, discriminant analysis, and exploratory factor analysis. Emphasizes analyzing data and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 654 | Structural Equation Modeling in Educational Research | Educational applications of confirmatory factor analysis, path analysis, and full latent variable models. Experience in conducting analyses and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| EDS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 200 | Design Literacy and Communication | Builds the requisite skills for students to be able to express their ideas visually. Gives exercises to create an understanding of basic principles of design as well as design communication, principles of composition and aesthetic evaluation. Uses tools such as sketching, drawing, computer graphics and model making as a vehicle to develop an understanding of visual methods of expressing one's self. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or The Arts (Fashion Design) major |
| EDS | 201 | Fundamentals of Sustainability in Design | Explores sustainability as it relates to the key disciplines that comprise environmental design. Topics range from issues affecting the preservation of the urban fabric to the development of earth-friendly materials used by interior designers and product designers to the design of sustainable buildings by architects through the use of appropriate materials and requisite energy efficiencies. Surveys the literature of sustainability, identifying critical issues on the subject today. Explores the theoretical underpinnings of the sustainability movement as it affects environmental design and related disciplines. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 223 | Design Thinking | Introduces the notion of design thinking, a concept that is gaining significant recognition in several disciplines including art, design, business, engineering and others. Design thinking can be described as a creative, multidisciplinary, human-centered approach to solving complex problems. Contemporary society faces numerous challenges, and the need for new tools and methods to tackle and solve these problems is more pressing than ever before. Offers several new techniques of design thinking and creative problem solving through engaging lectures and exciting projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 301 | Contemporary Issues in Design Strategies and Innovation | Covers theories and methods needed in design, innovation and management of environmental design projects. Uses best practices and case studies related to the design of artifacts and to the design of built environments as a vehicle to develop students' understanding of different aspects of environmental design in a real-world setting. Also discusses the impact of contemporary issues such as globalization, digital tools, global connectivity on the theories and practice of environmental design. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre- or corequisite(s): EDS 200 |
| EDS | 302 | Design Inquiry and Undergraduate Research | Theories and methods of design inquiry within a research environment. Prepares students for the senior-year synthesis courses. Students take on design-related research and develop and write a proposal for an integrative experience/project for an environmental design intervention and make an implementation plan to realize this intervention. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 301 |
| EDS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 401 | Environmental Design Synthesis I | First of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students identify a relevant research problem in environmental design and undertake the necessary literature search and reading regarding theories and methods related to the selected research question. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 302 |

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| EDS | 402 | Environmental Design Synthesis II | Second of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students implement the research study identified in the first semester of the two-semester sequence. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 401 |
| EDS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| EDS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| EDS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| EDT | 180 | Technology Literacy: Problem Solving using Digital Technology Applications | Introducing digital technologies and their place in society. Applies 21st-century skills to problem solving using digital technology applications including spreadsheets and databases. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 184 | Modeling, Inquiry, & Analysis Using Technology Tools | Project-based course as an overview of modeling, simulation, statistics, probability, and the role of technology in education, business and personal. Investigates exploration and presentation of emerging technology along with their acquisition, use, and implementation into society. Course includes the use of software programs and online simulations for scientific investigation, internet research, data collection, visual representation of data, probability, measures of central tendency, Action Research, 3D modeling, and Web page design. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 210 | Games, Technology and Society | Introduces the role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 220 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| EDT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 310 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing |
| EDT | 321 | Computer Literacy: Mobile Technologies and Your World | Uses mobile technologies across disciplines for communication, collaboration, creativity and problem solving. Employs digital tools including Microsoft Office's spreadsheets and databases, Google apps, mobile apps, and a variety of other Web-based tools in problem-based environments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Pre-requisite: Minimum 45 hours; Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 323 | Computer Applications | Introduces database design principles using Microsoft Access and general programming concepts using the Visual Basic.Net programming language. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Pre-requisites: EDT 321 or CSE 180 or any ACO, CIS, CSE, or CST course |

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| EDT | 329 | Games, Simulations, and Virtual Environments | Focuses on the use of Gaming, Simulations, and Virtual Environments (GS/VE) in education and instruction. Examines how educational professionals and other practitioners can leverage students interests in digital culture to accelerate their learning. Participants explore the foundational, social, and cultural implications of these new media and the power they hold to engage learners in new ways. Discusses historical overview of GS/VE with an emphasis on educational applications. Analyzes the distinctive features of GS/VE from different pedagogical, psychological (cognitive/emotional), social, and entertainment perspectives. Participants learn how to analyze the design of games, simulations, and virtual environments, creating evaluative criteria for the selection of products in educational environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 340 | Designing Games for Impact | Introduces concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing |
| EDT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 405 | Presentation Technology for Multimedia | Explores multimedia hardware and software used in creating presentations for educational, corporate, and commercial applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 406 | Computer Graphics and Animation | Study and application of design and animation techniques for use in video or computer-based presentations. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 455 | Authoring Tools | Use of current authoring tools to design and deliver computer-based instructional materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 460 | Games, Technology and Society | Education, healthcare and social activism. Explores general theories about the relationship between technology and society using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. Students play and analyze existing impact games as well as conduct a landscape analysis for an impact game on a topic of their own choosing. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only EDT 460 or 560 |
| EDT | 461 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| EDT | 462 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| EDT | 463 | Games for Impact: The Full Life Cycle | Presents an impact game publishing methodology covering the full life cycle and key considerations for impact game design, development and publishing as well as the unique challenges in making games for impact. Applies methodology to examine an existing impact game currently in development. Students collaboratively workshop an original impact game concept and publishing plan that harnesses the power of games to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing. Credit is allowed for only EDT 463 or EDT 563 |
| EDT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | IND | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDT | 501 | Foundations and Issues in Educational Technology | Introduces educational technology. Examines accomplishments and issues in the field. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 502 | Design and Development of Instruction | Design, development, and formative evaluation of objectives-based instructional materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 503 | Instructional Media Design | Uses media selection, design, and production principles to prepare design specifications for solutions to instructional messages and products. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 504 | Development of Computer-Based Instruction | Systematic design, development, and formative evaluation of computer-based instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 505 | Multimedia Presentation Techs | Explores the design of multimedia presentations and the utilization of tools and resources to effectively deliver those presentations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDT | 506 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 507 | Trends in Performance Improvement | Introduces the field of human performance technology. Emphasizes the analysis of performance problems, their causes, and interventions. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 with B or better |
| EDT | 511 | Technology Applications in Education | Integrates and evaluates emerging technologies into K-12 and adult teaching and learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 520 | Educational Technology and Training | Applies educational technology to training and human performance systems in business, industry, and government; emphasizes trends and project management. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 with C or better |
| EDT | 523 | Distance Education Theory and Practice | Explores development of distance learning principles by examining national and international systems and applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 524 | Principles and Issues in K-12 Online Learning | Examines current issues, policies, and trends pertaining to K-12 Web-based teaching and learning. Actively explores research related to online learning, with a focus on virtual schooling and emerging best practices for effective online instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Practicing or licensed K-12 teacher |
| EDT | 525 | Web Resources for Educators | Explores Web-based and distance learning applications for educators. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 527 | Instructional Video Production | Design and production of instructional video. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 503 with C or better |
| EDT | 528 | Development of Web-Based Instruction | Design and development of online instruction using advanced technologies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 530 | Technology Integration Methods across the Curriculum | Examines a constructivist approach to technology in education. Investigates technology as a catalyst for rethinking instructional goals and practices. | Y | LEL | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 540 | Creating and Marketing Mobile Apps | Focuses on conceptualizing, creating and marketing of apps for mobile devices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EDT 494 (Concept, creating & mktg APPS), 540 or 594 (Concept, creating & mktg APPS) |
| EDT | 545 | Using the Internet in Education | Explores the Internet as an educational tool for research, inquiry-based learning, and online learning communities. Incorporates constructivist theory. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 546 | Using Technologies for Presentations | Students create presentations appropriate for educational settings and electronic portfolios on CD-ROMs using scanners, digital/video cameras, and multimedia software. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 547 | Technology in Language Arts and Social Studies Education | Examines numerous ways technology is used to enhance teaching and learning in language arts and social studies classrooms. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 548 | Technology in Mathematics and Science Education | Examines numerous ways technology is used to enhance teaching and learning in mathematics and science classrooms. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 549 | Using the Internet and Case Studies to Solve Educational Problems | Provides a model of the use of distance education technologies. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 555 | Advanced Web Site Design and Development | Prepares technology leaders to design and create interactive school and district Web sites. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 556 | Managing School Information Systems | Applied course based on constructivist theory that examines the techniques and strategies of networking information systems within educational settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 560 | Games, Technology and Society | The role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 460 or EDT 560 |
| EDT | 561 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 562 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 563 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 463 or EDT 563 |

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| EDT | 575 | Critical Issues in Technology | Exploration and critical analysis of theoretical issues related to using technology in education. Students do literature reviews for EDT 593. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 634 | Technoliteracies | Online course explores the nature of digital communications and expanding definitions of what counts as text and as literate expression. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student. Credit is allowed for only RDG 634 or EDT 634 |
| EDT | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 701 | Research in Educational Technology | Review and analysis of research studies in educational technology. Methodology for designing, conducting, and reporting educational technology research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 and 502 with C or better |
| EDT | 703 | Research in Distance Education | Seminar with emphasis on research in telecommunications and distance education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: EDT 523 with C or better |
| EDT | 704 | Emerging Technologies in Education | Examines the role and impact of emerging technologies in education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student. Credit is allowed for only EDT 591 (Emerging Technologies in Education) or 704 |
| EDT | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisites: EDT 701 with C or better |
| EDT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 309 | Environmental Education Project | Covers topics in environmental education that assist students with being able to learn about and investigate their environment in order to make intelligent and informed decisions. | Y | LEL | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only EED 412, 494 (Project Wild Aquatic) or 494 (Project Wet) |
| EED | 324 | Social Studies in Elementary Schools | Social studies education standards, curriculum, and instructional and assessment strategies for all children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 or SPE 396; Admission to Professional Teacher Preparation Program |
| EED | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EED | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| EED | 414 | Elementary School Curriculum and Organization | Rationales for instructional curricula; alternative curriculum designs and broad-based content; selected topics in school governance, finance, and law. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Co-requisites: Elem Ed student, EED 411, EED 412, RDG 413 and EED 496 OR PDS (Professional Development School) student |
| EED | 433 | Language Method Management and Assessment | Theory on the social nature of oral and written language and congruent teaching, management, and assessment practices. Uses technology to enrich language instruction. Students who own a personal laptop computer are encouraged to bring it to class to engage in interactive technology-based literacy teaching and learning. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 464 | Middle-School Curriculum and Organization | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 478 | Student Teaching in the Elementary School | Student teaching in elementary school classrooms. Synthesized experience in curriculum, instruction, and classroom management | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 479 | Capstone Seminar in Elementary Education | Reflective, experienced-based integration of theory and practice; professional development for K-8 teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 496 | Field Experience III | Applies course content in a K78 school classroom. Emphasizes observation, pupil management, planning and delivery of instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | L | Prerequisite(s): admission to the Professional Teacher Preparation Program |

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| EED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 510 | Teaching Writing in the Elementary Classroom | Develops rationale, theory, and related practices for teaching writing in K-8 classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 511 | Principles of Curriculum Development | Contemporary curriculum theories. Curriculum as an interrelated entity. Principles of conceiving and effecting change. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 521 | Instructional Planning and Management in the Inclusive Classroom | Planning and delivering instruction; organizing and managing classrooms; making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 524 | Integrated Social Studies Methods for Elementary Classrooms | Social studies methods and standards applied across the curriculum, instructional and assessment strategies for all children in K-8 classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 526 | Communication Arts in the Elementary School | Critical examination of school language arts teaching, focusing on theoretical assumptions regarding oral- and written-language development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 529 | Science in the Elementary School | Problems and trends of current programs. Development of a balanced and articulated science program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 531 | Teaching with Educational Technology | Focuses on using technology in K-12 classrooms. Addresses the integration of technology in all curricular areas for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 537 | Mathematics in the Elementary School | Contemporary mathematics teaching. Content, materials, and approaches to instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 538 | Teaching Social Studies with Literature | Develops the rationale, resources, and strategies for adopting a literature-based approach to social studies teaching in grades K-8. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 548 | Teaching Geometry 5-8 | Practical ideas and activities for teaching informal geometry grades 5-8, based on research on how students learn geometry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 564 | Middle-School Curriculum and Organization | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 576 | Clinical Experience | Applies course content in elementary classrooms: observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 577 | Field Experience II | Advanced application of course content in elementary education classrooms; observations, pupil management, planning, and delivering instruction and assessment. | N | PRA | N | YGB | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: EED 576 |
| EED | 578 | Student Teaching in the Elementary School | Student teaching in elementary education setting for students in the MEd with Concentration in Teacher Certification. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 579 | Apprentice Teaching in Elementary Education | Apprentice teaching in elementary school classrooms. Must be taken four times for a total of 9 semester hours. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 581 | Diagnostic Practices in Mathematics | Specific skills in diagnosing and treating children's learning difficulties in mathematics. Includes practicum experiences, both on and off campus, in identifying strengths and weaknesses and initial remediation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 720 | Language in Education | Sociolinguistic seminar on language issues in education, including language acquisition, classroom interaction, language attitudes, relation language, and class-gender ethnicity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 730 | Discourse Analysis in Education | Surveys issues in and approaches to discourse analysis in educational research, with focus on students' projects using discourse analysis. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EED | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EED | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EED | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EEE | 101 | Introduction to Engineering Design | Introduces engineering design, teaming, engineering profession, computer models and programming, communication skills; design of electrical and computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 2 | | |
| EEE | 120 | Digital Design Fundamentals | Number systems, conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | |
| EEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | |
| EEE | 202 | Circuits I | Principles for analyzing linear and nonlinear circuits. Uses SPICE and MATLAB. Design and measurement of linear analog electrical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Pre/Co-requisites: MAT 274 (or MAT 275), and PHY 131 (with C or better if completed) |
| EEE | 203 | Signals and Systems I | Introduces continuous and discrete time signal and system analysis, linear systems, Fourier, and z-transforms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: EEE 202; Pre-requisite: MAT 242 with C or better if completed or Pre/Co-requisite: MAT 342 or 343 with C or better if completed |
| EEE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization. Instruction set architecture. Assembly language. Processor organization and design. Memory organization. IO programming. Exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: CSE 100, 110 or 200; CSE 120 or EEE 120; Credit is allowed for only EEE 230 or CSE 230 |
| EEE | 241 | Fundamentals of Electromagnetics | Vector analysis, differential operators, fourier analysis, scalar, vector fields, electro/magneto statics, time-varying fields, boundary value problems, dielectric, magnetic materials, Maxwell's equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: MAT 267 (or 272) with C or better; MAT 274 (or 275) with C or better; PHY 131 with C or better; Co-requisite: EEE 202 |
| EEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 304 | Signals and Systems II | Communication, signal processing, control systems, continuous, discrete transforms, sampling theorem, analog, digital modulation, filter design, signal processing applications, state space. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 203 |
| EEE | 333 | Hardware Design Languages and Programmable Logic | Develops digital logic with modern practices of hardware description languages. Emphasizes usage, synthesis of digital systems for programmable logic, VLSI. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 202 |
| EEE | 334 | Circuits II | Design of analog and digital circuits. Diodes/BJT/Mosfets. Digital and analog circuit building blocks. Fundamentals of mixed signal circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, BHSE undergraduate student or Computer Systems Engineering or Computer Systems Engineering (Information Assurance) student, EEE 202 |
| EEE | 335 | Analog and Digital Circuits | Analog, digital microelectronic circuits and systems. Amplifiers, frequency response, gate sizing, timing analysis, sequential digital circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 334 |
| EEE | 341 | Engineering Electromagnetics | Time-varying electromagnetic fields, waves in homogeneous and stratified media, transmission lines, waveguides and cavity resonators, radiation and antennas. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 203, EEE 241 |
| EEE | 350 | Random Signal Analysis | Probabilistic and statistical analysis as applied to electrical signals and systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, MAE 317 or pre- or corequisite: EEE 203; or Fulton Engineering graduate student |
| EEE | 352 | Properties of Electronic Materials | Schrodinger's wave equation, potential barrier problems, bonds of crystals, the band theory of solids, semiconductors, superconductor dielectric, and magnetic properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114, 115, 116 or 118, EEE 241; PHY 241 with a C or better |
| EEE | 360 | Energy Systems and Power Electronics | Conventional and alternate energy sources for power systems, three-phase analysis, AC generators, transformers, induction, DC motors, power electronic speed control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 202; Corequisite(s): EEE 241 |
| EEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 404 | Real-Time DSP Systems | Digital signal processors, translating signals and systems concepts into real-time multimedia and communications applications, real-time algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, CSE 230 or EEE 230; EEE 203 |
| EEE | 407 | Digital Signal Processing | Time and frequency domain analysis, difference equations, z-transform, FIR and IIR digital filter design, discrete Fourier transform, FFT, and random sequences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisites: Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 203; MAT 342 or 343 with C or better |
| EEE | 425 | Digital Systems and Circuits | Digital logic gate analysis and design. Propagation delay times, fan out, power dissipation, noise margins. Design of MOS and bipolar logic families, including NMOS, CMOS, standard and advanced TTL, ECL, and BiCMOS. Inverter, combinational and sequential logic circuit design, MOS memories, VLSI circuits. Computer simulations using PSPICE. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 335 |
| EEE | 433 | Analog Integrated Circuits | Analysis, design, and applications of modern analog circuits using integrated bipolar and field-effect transistor technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 335 |
| EEE | 434 | Quantum Mechanics for Engineers | Angular momentum, wave packets, Schrodinger wave equation, probability, problems in one dimension, principles of wave mechanics, scattering, tunneling, central forces, angular momentum, hydrogen atom, perturbation theory, variational techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 352 |
| EEE | 435 | Fundamentals of CMOS and MEMS | Introduces basic CMOS processing and fabrication tools. Covers the fundamentals of thermal oxidation, CVD, implantation, diffusion, and process integration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 352 |
| EEE | 436 | Fundamentals of Solid-State Devices | Semiconductor fundamentals, pn junctions, metal-semiconductor contacts, metal-oxide-semiconductor capacitors and field-effect transistors, bipolar junction transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student, EEE 352 |

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| EEE | 437 | Optoelectronics | Basic operating principles of various types of optoelectronic devices that play important roles in commercial and communication electronics; light-emitting diodes, injection lasers, and photodetectors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 436 |
| EEE | 439 | Semiconductor Facilities and Cleanroom Practices | Microcontamination, controlled environments, cleanroom layout and systems, modelling, codes and legislation, ultrapure water, production materials, personnel and operations, hazard management, advanced concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 352 |
| EEE | 443 | Antennas for Wireless Communications | Fundamental parameters; radiation integrals; wireless systems; wire, loop, and microstrip antennas; antenna arrays; smart antennas, ground effects; multipath. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 341 |
| EEE | 445 | Microwaves | Waveguides; circuit theory for waveguiding systems; microwave devices, systems, and energy sources; striplines and microstrips; impedance matching transformers; measurements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 341 (EEE 340) |
| EEE | 448 | Fiber Optics | Principles of fiber-optic communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 341 (EEE 340) |
| EEE | 455 | Communication Systems | Signal analysis techniques applied to the operation of electrical communication systems. Introduction to and overview of modern digital and analog communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 350 |
| EEE | 459 | Communication Networks | Fundamentals of communication networks. Study of Seven-Layer OSI model. Focus on functionality and performance of protocols used in communication networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 203. Corequisite(s): EEE 350 |
| EEE | 460 | Nuclear Power Engineering | Radioactivity and decay. Radiation interactions and dose. Nuclear reaction, fission and fusion theory. Fission reactors, four factor formula, moderation. Nuclear power, TMI, Chernobyl. Nuclear fuel cycle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student CHM 114 or 116; MAT 274 or 275 with C or better; PHY 241 or 361 with C or better |
| EEE | 463 | Electrical Power Plants | Generation of electric power using fossil, nuclear, and renewable, including solar, geothermal, wind, hydroelectric, biomass and ocean, energy sources. Power plant thermal cycle analysis. Cogeneration and combined cycles. Economics operations, and design of electric power stations. Energy storage. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student CHM 114 or 116; MAE 240 (or ECE 340) or PHY 241 with C or better; MAT 274 or 275 with C or better |
| EEE | 465 | Photovoltaic Energy Conversion | Photovoltaics for production of electricity from solar energy. The grand energy challenge. Solar radiation and utilization. Fundamentals of semiconductors for photovoltaics: crystal structures, band theory, doping, carrier statistics, optical absorption, and p-n junctions. Principles of solar cells including loss mechanisms and design principles. Current solar cell technologies. Manufacturing of silicon solar cells. Solar modules, arrays and systems. Economic analysis of solar photovoltaic systems. Terawatt-scale deployment of solar cells. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 352. Credit is allowed for only EEE 465 or 498: Solar Energy |
| EEE | 470 | Electric Power Devices | Analyzes devices used for short circuit protection, including circuit breakers, relays, and current and voltage transducers. Protection against switching and lightning over voltages. Insulation coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 360 |
| EEE | 471 | Power System Analysis | Review of transmission line parameter calculation. Zero sequence impedance, symmetrical components for fault analysis, short circuit calculation, review of power flow analysis, power system stability, and power system control concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 360 |
| EEE | 472 | Power Electronics and Power Management | Principles of switch mode power conversion, analysis, design and control of dc-dc converters, PWM rectifiers and inverters, power management, power electronics applications in information technology, renewable energy systems, motion control and lighting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 203 |
| EEE | 473 | Electrical Machinery | Operating principles, modeling and speed control of DC, brushless DC, and AC machines; power converters for DC and AC motors drives. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 360 |
| EEE | 480 | Feedback Systems | Analysis and design of linear feedback systems. Frequency response and root locus techniques, series compensation, and state variable feedback. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 203 or MAE 318 with C or better |
| EEE | 481 | Computer-Controlled Systems | Implements computer-based, embedded, control systems using MATLAB xPC Target toolbox. Small-scale, representative projects demonstrate theoretical issues and provide hands-on expertise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 203 and EEE 230/CSE 230, or MAE 318 |
| EEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |
| EEE | 488 | Senior Design Laboratory I | Design process: research, concept, feasibility, simulation, specifications, benchmarking, and proposal generation. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student ENG 102, 105 or 108; EEE 241; EEE 334; EEE 350; three courses from the following list: EEE 304, 333, 335, 341, 352 or 360 |
| EEE | 489 | Senior Design Laboratory II | Implement, evaluate, and document EEE 488 design. Social, economic, and safety considerations. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE senior or post-bacc undergraduate student; EEE 488 |
| EEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 0-6 | L | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student EEE 433 |
| EEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-7 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |

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| EEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | Prerequisite(s): Electrical Engineering BSE senior |
| EEE | 501 | Overview of Electrical Engineering | Electromagnetic fields, electrical circuit analysis, transmission lines, communications systems, electromagnetic interference and compatibility, computational techniques and electromagnetic software | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 505 | Time-Frequency Signal Processing | Joint time-frequency analysis of time-varying signals and systems; linear and quadratic time-frequency representations; applications in current areas of signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 506 | Digital Spectral Analysis | Principles and applications of digital spectral analysis, least squares, random sequences, parametric, and nonparametric methods for spectral estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 507 | Multidimensional Signal Processing | Processing and representation of multidimensional signals. Design of systems for processing multidimensional data. Introduces image and array processing issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 508 | Digital Image and Video Processing and Compression | Fundamentals of digital image perception, representation, processing, and compression. Emphasizes image coding techniques. Signals include still pictures and motion video. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 509 | DSP Algorithms and Software | Linear systems review, digital filter design, software aspects, DFT, FFT, random signals, programming aspects, applications projects, MATLAB and Java simulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 510 | Multimedia Signal Processing | Speech/audio coding algorithms. LPC, CELP, MPEG, Cell phone, DTV, cinema, and surround sound standards. MPEG/JPEG introduction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 511 | Artificial Neural Computation | Networks for computation, learning function representations from data, learning algorithms and analysis, function approximation and information representation by networks, applications in control systems and signal analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit for only MSE 518, EEE 519, MAE 518, MSE 475, or CHE 518 |
| EEE | 523 | Advanced Analog Integrated Circuits | Analysis and design of analog integrated circuits: analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 524 | Communication Transceiver Circuits Design | Communication transceivers and radio frequency system design; fundamentals of transceivers circuits, RF, IF, mixers, filters, frequency synthesizers, receivers, CAD tools, and lab work on IC design stations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 525 | VLSI Design | Analysis and design of Very Large Scale Integrated (VLSI) circuits. Physics of small devices, fabrication, regular structures, and system timing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 526 | VLSI Architectures | High throughput and low-power VLSI architectures for signal processing. Array processor systems, data path design and optimization; memory design; high-level synthesis; low-power design at system level, algorithm level, and architecture level. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 527 | Analog to Digital Converters | Detailed introduction to the design of Nyquist rate, CMOS analog to digital converters. Requires knowledge of analog integrated circuits (analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits) to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 528 | Introduction to Microelectromechanical Systems | Microelectromechanical systems and devices emphasizing analytical and numerical modeling of actuation and sensing mechanisms with an overview of fabrication technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 530 | Advanced Silicon Processing | Thin films, CVD, oxidation, diffusion, ion-implantation for VLSI, metallization, silicides, advanced lithography, dry etching, rapid thermal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 531 | Semiconductor Device Theory I | Transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 532 | Semiconductor Device Theory II | Advanced MOSFETs, charge-coupled devices, solar cells, photodetectors, light-emitting diodes, microwave devices, and modulation-doped structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 533 | Semiconductor Process/Device Simulation | Process simulation concepts, oxidation, ion implantation, diffusion, device simulation concepts, pn junctions, MOS devices, bipolar transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 534 | Semiconductor Transport | Carrier transport in semiconductors. Hall effect, high electric field, Boltzmann equation, correlation functions, and carrier-carrier interactions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 535 | Electron Transport in Nanostructures | Nanostructure physics and applications. 2-D electron systems, quantum wires and dots, ballistic transport, quantum interference, and single-electron tunneling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 536 | Semiconductor Characterization | Measurement techniques for semiconductor materials and devices. Electrical, optical, physical, and chemical characterization methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 537 | Semiconductor Optoelectronics | Electronic states in semiconductors, quantum theory of radiation, absorption processes, radiative processes, nonradiative processes, photoluminescence, and photonic devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 539 | Intro Solid-State Electronics | Crystal lattices, reciprocal lattices, quantum statistics, lattice dynamics, equilibrium, and nonequilibrium processes in semiconductors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 540 | Fast Computational Electromagnetics | Method of moments, finite difference time-domain, finite element methods implemented using fast algorithms (wavelets, FMM, Nystrom) to gain high efficiency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 541 | Electromagnetic Fields and Guided Waves | Polarization and magnetization; dielectric, conducting, anisotropic, and semiconducting media; duality, uniqueness, and image theory; plane wave functions, waveguides, resonators, and surface guided waves. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 543 | Antenna Analysis and Design | Impedances, broadband antennas, frequency independent antennas, miniaturization, aperture antennas, horns, reflectors, lens antennas, and continuous sources design techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 544 | High-Resolution Radar | Fundamentals; wideband coherent design, waveforms, and processing; stepped frequency; synthetic aperture radar (SAR); inverse synthetic aperture radar (ISAR); imaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 545 | Microwave Circuit Design | Analysis and design of microwave attenuators, in-phase and quadrature-phase power dividers, magic tees, directional couplers, phase shifters, DC blocks, and equalizers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 546 | Advanced Fiber Optics | Theory of propagation in fibers, couplers and connectors, distribution networks, modulation, noise and detection, system design, and fiber sensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 547 | Microwave Solid-State Circuit Design I | Applies semiconductor characteristics to practical design of microwave mixers, detectors, limiters, switches, attenuators, multipliers, phase shifters, and amplifiers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 548 | Coherent Optics | Diffraction, lenses, optical processing, holography, electro-optics, and lasers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 549 | Lasers | Theory and design of gas, solid, and semiconductor lasers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 550 | Transform Theory and Applications | Introduces abstract integration, function spaces, and complex analysis in the context of integral transform theory. Applications to signal analysis, communication theory, and system theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 551 | Information Theory | Entropy and mutual information, source and channel coding theorems, applications for communication and signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 552 | Digital Communications | Complex signal theory, digital modulation, optimal coherent and incoherent receivers, channel codes, coded modulation, Viterbi algorithm. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 553 | Coding and Cryptography | Introduces algebra, block and convolutional codes, decoding algorithms, turbo codes, coded modulation, private and public key cryptography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 554 | Random Signal Theory | Applies statistical techniques to the representation and analysis of electrical signals and to communications systems analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 556 | Detection and Estimation Theory | Combines the classical techniques of statistical inference and the random process characterization of communication, radar, and other modern data processing systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 557 | Broadband Networks | Physics of wireless and optical communications. Broadband multiplexing and switching methods. Blocking and queuing analysis. Network optimization, routing, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 558 | Wireless Communications | Cellular systems, path loss, multipath fading channels, modulation and signaling for wireless, diversity, equalization coding, spread spectrum, TDMA/FDMA/CDMA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 559 | Wireless Networks | Design principles of cellular networks. Multiple access control protocols for wireless systems. Wireless routing and TCP/IP. Mobile management. Call admission control and resource allocation (e.g., power control and rate control). Wireless security. Future-generation wireless networks. A previous course in random signal theory is required to be successful in this class. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only CSE 591 (Wireless Networks), EEE 559 or 598 (Wireless Networks) |
| EEE | 562 | Nuclear Reactor Theory and Design | Principles of neutron chain reacting systems. Neutron diffusion and moderation. One-, two-, and multigroup diffusion equation solution methods. Heterogeneous reactors. Nuclear fuel steady-state performance. Core thermal-hydraulics. Core thermal design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 563 | Nuclear Reactor System Dynamics and Diagnostics | Time-dependent solution to neutron diffusion equation. Reactor kinetics and reactivity changes. Dynamics, stability, and control of reactor systems. Modeling neutronic and thermal processes. System characterization in time and frequency domains. Reactor surveillance and diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 564 | Interdisciplinary Nuclear Power Operations | Nuclear power plant systems. Studies interrelationship and propagation of effects that systems and design changes have on one another, especially in relation to nuclear power plant safety and operations. Case studies and design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 565 | Solar Cells | Introduction to the generation and utilization of electricity from solar energy. Exploration of the science and engineering of direct conversion (photovoltaics), including the design, fabrication, and operation of solar cells, and the construction and performance of solar cell modules. Prior knowledge of properties of electronic materials is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 571 | Power System Transients | Simple switching transients. Transient analysis by deduction. Damping of transients. Capacitor and reactor switching. Transient recovery voltage. Travelling waves on transmission lines. Lightning. Protection of equipment against transient overvoltages. Introduces computer analysis of transients. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 572 | Advanced Power Electronics | Analyzes device operation, including thyristors, gate-turn-off thyristors, and transistors. Design of rectifier and inverter circuits. Applications such as variable speed drives, HVDC, motor control, and uninterruptible power supplies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 573 | Electric Power Quality | Sinusoidal waveshape maintenance; study of momentary events, power system harmonics, instrumentation, filters, power conditioners, and other power quality enhancement methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 574 | Computer Solution of Power Systems | Algorithms for digital computation for the Newton and fast-decoupled power flow problem, and fault analysis. Sparse matrix and vector programming methods, creation of elimination trees, network equivalence, solution of the least squares problem, introduction to state estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 575 | Power System Stability | Dynamic performance of power systems with emphasis on stability. Modeling of system components and control equipment. Analysis of the dynamic behavior of the system in response to small and large disturbances. Knowledge of EEE470, 471 and 473 (or equivalents) is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 576 | Power System Dynamics | Dynamic performance of power systems with emphasis on control. Modeling of control equipment, FACTS devices, wind generators, and nonlinear loads. Design of power system stabilizers. Prior knowledge of electric power devices, power system analysis, and electrical machinery is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only EEE 576 or 598 (Power System Dynamics) |
| EEE | 577 | Power Engineering Operations and Planning | Economic dispatch, unit commitment, dynamic programming, power system planning and operation, control, generation modeling, AGC, and power production. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 579 | Power Transmission and Distribution | High-voltage transmission line electric design; conductors, corona, RI and TV noise, insulators, clearances. DC characteristic, feeders voltage drop, and capacitors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 581 | Filtering of Stochastic Processes | Modeling, estimation, and filtering of stochastic processes, with emphasis on the Kalman filter and its applications in signal processing and control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 582 | Linear System Theory | Controllability, observability, and realization theory for multivariable continuous time systems. Stabilization and asymptotic state estimation. Disturbance decoupling, noninteracting control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 586 | Nonlinear Control Systems | Stability theory, including phase-plane, describing function, Liapunov's method, and frequency domain criteria for continuous and discrete, nonlinear, and time-varying systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 587 | Optimal Control | Optimal control of systems. Calculus of variations, dynamic programming, linear quadratic regulator, numerical methods, and Pontryagin's principle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 588 | Design of Multivariable Control Systems | Practical tools for designing robust MIMO controllers. State feedback and estimation, model-based compensators, MIMO design methodologies, CAD, real-world applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 589 | Linear Algebra and Convex Optimization | Linear algebra and convex optimization. Vector spaces, matrix algebra, linear programming, Lagrange multipliers, Karush-Kuhn-Tucker (KKT) conditions, duality theory and algorithms for convex optimization. Newton's method, gradient and steepest descent methods. Algorithms for unconstrained, equality constrained and inequality constrained problems, which include interior point methods. Applications to approximation and data fitting and some geometric problems. Applications to signal processing, communications and control systems. Background in linear algebra necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit allowed for only EEE 589 or 598: Advanced Linear Algebra & Opt |
| EEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Master of Engineering or Electrical Engineering MS, MSE or PHD students |
| EEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| EEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 606 | Adaptive Signal Processing | Principles and applications of adaptive signal processing, adaptive linear combiner, Wiener least-squares solution, gradient search, performance surfaces, LMS/RLS algorithms, block time/frequency domain LMS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 607 | Speech Coding for Multimedia Communications | Speech and audio coding algorithms for applications in wireless communications and multimedia computing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 625 | Advanced VLSI Design | Practical industrial techniques, circuits, and architectures appropriate to high-performance and low-power digital VLSI designs such as microprocessors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 627 | Oversampling Sigma-Delta Data Converters | Introduces design and analysis of sigma delta oversampled data converters from an IC design perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 631 | Advanced Optoelectronics | Principles of heterojunctions and quantum well structures, band lineups, optical, and electrical properties. Introduces heterojunction devices. Knowledge of transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors, is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 641 | Advanced Electromagnetic Field Theory | Cylindrical wave functions, waveguides, and resonators; spherical wave functions and resonators; scattering from planar, cylindrical, and spherical surfaces; Green's functions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 643 | Advanced Topics in Electromagnetic Radiation | High-frequency asymptotic techniques, geometrical and physical theories of diffraction (GTD and PTD), moment method (MM), radar cross section (RCS) prediction, Fourier transforms in radiation, and synthesis methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 686 | Adaptive Control | Main topics covered: adaptive identification, convergence, parametric models, performance and robustness properties of adaptive controllers, persistence of excitation, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering MS, MSE, or PHD student or Master of Engineering student |
| EEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 731 | Advanced MOS Devices | Threshold voltage, subthreshold current, scaling, small geometry effects, hot electrons, and alternative structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering PhD students |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-----------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EEE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EET | 396 | Professional Orientation | Technical, professional, economic, and ethical aspects of electronics/computer engineering technology practice and industrial organization. | N | LEC | N | OPT | College of Tech & Innovation | INACTIVE Department of Engineering Technology | 1 | | |
| EET | 401 | Digital Signal Processing for Multimedia | Applies DSP techniques to multimedia. Digital filter analysis and design. Time and frequency techniques. Computer applications. | N | LEC | N | OPT | College of Tech & Innovation | INACTIVE Department of Engineering Technology | 3 | | Pre-requisites: Undergraduate Technology and Innovation or Fulton Engineering student; Min GPA 2.25; MAT 262 or 272 OR Technology and Innovation or Fulton Engineering graduate student. Credit is allowed for only CST 401 or EET 401 |
| EET | 403 | PLCs, Sensors and Actuators | Applications, programming, and troubleshooting using PLCs. Interfacing to motors, sensors, and actuators. Fluid power principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EET | 406 | Control System Technology | Control system components, analysis of feedback control systems, stability, performance, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3-4 | | Pre-requisites: EST 310; MAT 266; Credit for EET 506 or EET 406 |
| EET | 407 | Energy Conversion and Applications | Electricity, magnetism, mechanics, heat and units, and three-phase circuits. Electrical machines, transformers, generation, transmission, and distribution of electrical energy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 4 | | Pre-requisites: Technology and Innovation student, Minimum ASU GPA of 2.25; EET 208 OR Graduate Tech and Innovation student |
| EET | 408 | Digital Real-Time Control | Analysis, simulation, and design of discrete systems. Approach taken in this class begins with the analysis, simulation and design of a continuous system, which yields an s-based, transfer function compensator. Then, this compensator is transformed into a z-based transfer function, which can be realized with a difference equation in a microcontroller. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EET 406; Credit is allowed for only EET 408 or 494 (Digital Realtime Control) |
| EET | 410 | Electronic Circuits II | Analysis and design of OP-amps, power amplifiers, and digital logic families. Feedback design using frequency response. Computer analysis and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student, Minimum GPA 2.25; EET 301 and 310 OR Fulton Schools of Engineering graduate student or Fulton Engineering non-degree student |
| EET | 430 | Instrumentation and Measurement Systems | Instrumentation and measurement techniques, sensors operating principles. Signal and error analysis. Signal conditioning and data acquisition. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only EET 430 or 530 |
| EET | 460 | Power Electronics | Circuits and equipment for control, distribution and conversion of electrical power and energy. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisites: EST 310 |
| EET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EET | 506 | System Dynamics and Control | Time, frequency, and transform domain analysis of physical systems. Transfer function analysis of feedback control systems performance and stability. Compensation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 406 or EET 506 |
| EET | 508 | Digital Real-Time Control | Sample data control techniques and applications to process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EET | 530 | Electronic Test Systems and Applications | Analysis, design, and application of electronic test equipment, test systems, specifications, and documentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 430 or EET 530 |
| EET | 560 | Industrial Electronics and Applications | Analysis, design, and application of special electronic devices and systems to industrial control, power, communications, and processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EET | 579 | Digital Image Communication | Image capture, transform, compression, storage, and transmission. Provides computer environment (software and hardware) to emphasize the practical aspect. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EET | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EGR | 101 | Foundations of Engineering Design Project I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only SER 101 or EGR 101 |
| EGR | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CAD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 101; MAT 170 or higher; Pre- or corequisite(s): ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| EGR | 104 | Critical Inquiry in Engineering | Critical thinking. Systematic evaluation of information as input to well-informed decision making. Close reading and substantive writing in a technical setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): ENG 101, 105 or 107 |
| EGR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------|
| EGR | 201 | Use-Inspired Design Project I | Design, professionalism, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): APM 265, 270, MAT 265 or 270; EGR 102 |
| EGR | 202 | Use-Inspired Design Project II | Design, problem solving, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 201 |
| EGR | 216 | Engineering Electrical Fundamentals | Introduces modeling of electrical systems using mathematical and scientific principles. Covers electrical circuit analysis techniques including Kirchhoff's and Ohm's laws, series and parallel circuit elements, equivalent elements and circuits, and nodal analysis. These techniques are developed for DC, AC, and transient conditions. Also introduces the basic structure of a modern electronic measurement system and relates this structure to measurement accuracy, precision and resolution. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MAT 265 or MAT 270. Credit is allowed for only EGR 216 or 294 Engineering Fundamentals I |
| EGR | 217 | Engineering Mechanics Fundamentals | Provides a foundation in the theory and principles of statics and dynamics. Examines the effect of forces acting on particles and rigid bodies. Vector mechanics is used extensively. Statics addresses the topics of equilibrium in two and three dimensions, to include distributed loads, trusses, frames, friction and cables. Dynamics addresses kinematics, including translating and rotating reference frames, and two-dimensional kinetics methods of force-acceleration, work-energy, and impulse-momentum. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: PHY 121. Credit is allowed for only EGR 217 or 294 Engineering Fundamentals II |
| EGR | 218 | Materials and Manufacturing Processes | Applies material properties and manufacturing processes to the design and fabrication of engineered artifacts. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): CHM 113 or 114. Credit is allowed for only EGR 218 or 294 Engineering Materials & Manufacturing |
| EGR | 219 | Computational Modeling of Engineering Systems | Introduces computing that develops software to find solutions to engineering problems. Students write and document code to solve problems in data acquisition, modeling of physical systems, and optimization. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EGR 219 or 294 Computational Modeling |
| EGR | 240 | CADD and Solid Modeling | Uses 3-D solid modeling software to model mechanical parts and produce valid engineering drawings, including use of geometric dimensioning and tolerancing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EGR | 280 | Engineering Statistics | Applications-oriented introduction to statistics with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): APM 265, 270, MAT 265 or 270 |
| EGR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 301 | Concentration Project I | Design, communication, and critical thinking developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; MAT 267 (or MAT 272) |
| EGR | 302 | Concentration Project II | Design, engineering practice, and communication developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 |
| EGR | 303 | Mechanical Systems Project I | Analyze, design, implement and characterize a mechanical system through an in-depth mechanical system design project. Project includes modeling, analysis and measurement of the dynamic behavior of the mechanical system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 304 | Electrical Systems Project I | Analyze, design, implement and debug an electrical or electromechanical system through an in-depth electrical system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 219 |
| EGR | 305 | Robotics Systems Project I | Analyze, design, implement and debug a robotic electromechanical system through an in-depth robotic system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 219 |
| EGR | 306 | Automotive Systems Project I | Analyze, design, implement and verify an automotive system through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 307 | Humanitarian Engineering Project I | Analyzes, designs, implements and characterizes an engineered system that addresses a humanitarian objective. Project includes modeling, analysis and measurement of the behavior of the system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 202; EGR 217 (or 294 Engineering Fundamentals II). Pre- or Co-requisite: EGR 321 |
| EGR | 308 | Manufacturing System Project I | Focuses on design for product realization in a manufacturing environment. Projects are industry driven and applicable to low-volume product development. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: EGR 202 |
| EGR | 310 | Environmental Systems Project I | Analyze, design, implement and verify an engineered system that addresses an environmental objective through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 312 | Environmental Systems Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses an environmental need in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of environmental engineering; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 (or EGR 310) |
| EGR | 313 | Mechanical Systems Project II | Applies design principles to conceptualize, implement and characterize a fluid and/or thermodynamic system in a project setting. Project emphasizes communication with project stakeholders; applying an appropriate design approach in the context of a fluid and/or thermodynamic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 (or EGR 303), 340 |

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| EGR | 314 | Electrical Systems Project II | Applies design principles to conceptualize, implement and characterize an electrical or electromechanical system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an electrical system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 (or EGR 304); 330 (or EGR 333) |
| EGR | 315 | Robotic Systems Project II | Applies design principles to conceptualize, implement and characterize an electromechanical robotic system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of a robotic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 (or EGR 305), 455 |
| EGR | 316 | Automotive Systems Project II | Applies design principles to conceptualize, implement and characterize an automotive system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an automotive system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 or EGR 306 |
| EGR | 317 | Humanitarian Engineering Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses a humanitarian objective in a project setting. Project emphasizes communication with project stakeholders, applying an appropriate design approach, thinking critically in developing system specifications and evaluating a prototype relative to these specifications, and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 307; EGR 371 |
| EGR | 318 | Manufacturing Systems Project II | Focuses on process development for high-volume manufacturing in the competitive global economy. Uses discrete event simulation software to model and study the manufacturing environments. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 301 or 308; EGR 382 |
| EGR | 321 | Water Resource Systems | Fundamentals of water supply and surface water hydrology in the context of the engineering, design and analysis of water resources systems. Places particular emphasis on those aspects of water systems that apply in the context of the developing world as well as in the context of environmentally sustainable systems. Course delivery is designed for engineering students with a broad understanding of engineering fundamentals but without specialist civil engineering knowledge. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 217 (or 294 Engineering Fundamentals II); EGR 219 (or 294 Computational Modeling) |
| EGR | 324 | Structural Design for Land Development | Covers essential structural engineering concepts including loads, materials, constraints, specifications, optimization, and the design environment; structural modeling, analysis, and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 221; EGR 222 |
| EGR | 325 | Water and Wastewater Treatment | Essential elements of aquatic chemistry, water pollution and water and wastewater treatment technologies. Provides a fundamental basis for understanding sustainable water and wastewater treatment processes and their design considerations. Includes critical evaluation of contemporary issues concerning our water environment and the associated regulatory framework to strengthen and emphasize importance of adequate practices used in operation and design of engineered water and wastewater treatment systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: CHM 113; EGR 321 or 394 (Water Resources Engineering) |
| EGR | 330 | Design of Electrical Systems | Overview of electrical system architectures and components used in design of smart electrical and electromechanical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219; Corequisite(s): EGR 301 |
| EGR | 333 | Distributed Circuits and Systems | Analysis and modeling of the generation and distribution of electrical signals and energy across distributed systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 334 | Analog-Digital Interface | Signal processing and operational tools that lie between sensors and digital data processors developed from a system perspective. Includes selection, deployment and analysis of sensors, analog signal processors and converters as well as their appropriate power supplies and the impact of all these components on system performance and cost. Uses experimental and simulation tools to demonstrate typical-use cases for medical, military, industrial and consumer applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 |
| EGR | 335 | Instrumentation III | Noise in electrical systems and associated limits on instrumentation and measurement. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): EGR 235 |
| EGR | 336 | Introduction to Mechatronics | Pneumatic, hydraulic, mechanical, and electrical actuators. Models of mechatronic systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): EGR 231, 235 and 238 |
| EGR | 338 | Microcontrollers in Smart Systems | Microcontroller implementation of smart systems. Microcontrollers applied to control dynamic systems, including the interface with sensors and actuators as well as developing simple open- and closed-loop control laws. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 and 334 |
| EGR | 339 | Fabrication of Electrical Systems | Overview of electrical fabrication techniques; design cycle time, cost, quality, reliability, product life cycle, and testing; programmable versus hard-wired implementation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables. Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 121; APM 266, 271, MAT 266 or 271; Credit is allowed for only EGR or MET 340 |
| EGR | 343 | Mechanics of Solid Materials | Studies strength and physical performance, such as deformations and load-carrying capacity, of natural and artificial solid structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 (or EGR 294 Engineering Fundamentals II), 218 (or EGR 294 Engineering Materials & Manufacturing) |

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| EGR | 363 | Automotive Powertrains and Thermal Systems | Internal combustion engine (ICE) design in the context of automotive systems and heat management in vehicle systems, including thermal design of engine and transmission cooling systems. Operating characteristics and efficiencies of the ICE, terminology and abbreviations used in the automotive industry, contemporary fuels and the latest hybrid technology, CAFE standards and EPA vehicle emissions standards, lubrication systems and fluids appropriate for a given design, and current and future standards requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340 |
| EGR | 371 | Best Practices for Humanitarian Engineering | Technological and process-based best practices for engineering students to gain applied competence in low-cost and low-tech appropriate methods and technologies for small-scale technical problems in local and international humanitarian development contexts. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering major; junior or senior standing |
| EGR | 381 | Manufacturing Processes and Validation Lab | Theory of basic manufacturing processes accompanied by the fundamental skills; safety practices while working with engineering drawings, machine tools and metrology equipment related to manufacturing. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 202 and 217 |
| EGR | 382 | Modeling of Manufacturing Systems I | Modeling of manufacturing systems using discrete event simulation. Introduces basic manufacturing-related data and system configurations. Uses commercial simulation software to build and analyze model output data. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; 280 |
| EGR | 383 | Communications in a Production Environment | Effective communication is essential in all production environments for efficiency, yield and safety. Covers the major applications within a company and the expectations for the individual's capabilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202 and 280 |
| EGR | 385 | Design for Manufacturing | Introduces the methods employed to design and produce products that can compete in the global marketplace. Topics include design for manufacturability and assembly, product life-cycle, economics of design and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 202; EGR 218 (or EGR 294 Engineering Materials & Manufacturing) |
| EGR | 386 | Integrated Circuit Manufacturing | Integrated circuit manufacturing combines judicious selection of materials with nano-meter features to create complex digital and analog circuits. The process demonstrates extreme applications of design, control and resource organization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202 and 280 |
| EGR | 387 | Industrial Automation | Introduces concepts and application of industrial automation systems. Topics include PLC control systems, embedded control systems, sensing technologies, robotics and material-handling systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 219 |
| EGR | 388 | Engineering Materials And Semiconductor Science | Semiconductor technology operates at the limits of our understanding of many sciences--materials, optics, mechanics, plasma chemistry and charge movement. As well as examining the concepts, considers how they interact within tight constraints and how this affects continuous production, future development options and trouble shooting. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: Engineering BSE or Manufacturing Engineering BS major; Junior standing |
| EGR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 401 | Professional Design Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 302, 312, 313, 314, 315, 316, 317 or 318 |
| EGR | 402 | Professional Design Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 401 taken within one previous term |
| EGR | 423 | Land Development Engineering I | Identifies engineering issues in land development. Introduces site design, transportation planning and traffic engineering, roadway design, and environmental engineering. The role of the engineer in the design of the planned environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Corequisite(s): EGR 401 |
| EGR | 425 | Unit Treatment Technologies and Systems | Addresses fundamental concepts of unit treatment technologies and the scientific and engineering principles that govern the proper design, operation and management of these systems. Course is divided into two overlapping major categories of unit treatment technologies: air-pollution controls and soils/groundwater remediation. Enhances understanding of the unit treatment technologies by reviews of dimensional analysis, mass transport mechanisms, mass balances, modeling, kinetics and reactors. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 426 | Integrated Solid Waste Systems | Addresses the fundamental concepts of solid waste, pathways and transformation processes following the from cradle-to-grave approach. Follows the life of the solid waste from point of generation, reclamation and treatment to point of disposal. Emphasizes describing the present solid waste systems as an integrative set of functional units. Considers physical, chemical and biological transformations of the solid waste, together with the existing technologies and practices for management, treatment and disposal of the solid waste. Includes a specific overview of sustainable solid waste practices such as waste minimization, pollution prevention, reuse and reclamation, together with current domestic and foreign regulations. Addresses planning and design of solid waste operations and facilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |

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| EGR | 427 | Principles of Hazardous Waste and Materials | Trains future environmental engineers and professionals in fundamental hazardous waste and materials concepts. Addresses regulatory requirements; materials hazard communication; material safety concepts, types of hazardous waste/materials (chemical, radioactive, and infectious); risk assessment and routes of exposure; personal protective equipment; prudent practices; treatment, storage and disposal of hazardous waste/materials through the lens of the cradle-to-grave concept. Gains knowledge about the hazardous waste enforcement processes. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 430 | Design, Fabrication, and Architecture of Electronic Devices | Comprehensive introduction to the design, operation, production and application of the most common semiconductor devices and categories of integrated circuit. Demonstrates the close interaction among materials, semiconductor physics and circuit performance, especially in terms of the applications and economics of digital systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 431 | Power Management | Devices and techniques to supply and manage power in electrical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340; Credit is allowed for only EGR 432 or MET 432 |
| EGR | 433 | Transforms and Systems Modeling | State-space and transform-domain modeling and analysis of electrical and electromechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216 (or EGR 294 Engineering Fundamentals I), 217 (or EGR 294 Engineering Fundamentals II); MAT 274 (or MAT 275); Co-requisite: MAT 342 (or 343) |
| EGR | 444 | Engineering Design | Applies fundamentals of mechanics in analysis and synthesis of machine components and systems, with emphasis on stress and failure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: EGR 343 |
| EGR | 445 | Mechanical Engineering Systems | Design and modeling of multicomponent electromechanical systems. Applications of computers, controllers, electronics using system hardware and software development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 (or EGR 302 or 303 or 313) |
| EGR | 455 | Robotic Systems I | Analysis and design of robotic systems focusing on kinematics, dynamics, coordinate transformations and modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219; Credit is allowed for only EGR 455 or EGR 394 (Robotics I) |
| EGR | 456 | Robotic Systems II | Design of robotic systems focusing on dynamics, modeling and controlling a robot. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 356; Credit is allowed for only EGR 456 or EGR 494 (Robotics II) |
| EGR | 463 | Vehicle Electrical Systems & Hybrid Systems | Basic theory and operation of hybrid electric drive systems of motor vehicles. Covers fundamentals of next generation electrification including: batteries technology, charging, power electronic operation. Emphasizes the principals of HEV energy management strategies and HEV modeling fundamentals. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216 (or EGR 294 Engineering Fundamentals I) and 363 (or EGR 394 Intro to Concepts in Automotive Engineering or MET 321) |
| EGR | 465 | Ground Vehicle Dynamics | Basic understanding of vehicle dynamics principles and a sufficient knowledge to analyze vehicle dynamic performance and associated chassis system design concepts. Understanding of various dynamical equations of motion governing vehicle behavior as well as computer simulation. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 363 (or EGR 394 Intro to Concepts in Automotive Engineering or MET 321) |
| EGR | 476 | Energy Infrastructures | Comprehensive study of sustainable energy conversion systems. Students learn to quantify and measure the concepts of sustainability of energy resources within the framework of the laws of thermodynamics. Covers conventional energy sources for primary power (fossil fuels, nuclear and hydroelectric), their sustainability, resource level and environmental impact. Covers the science and technology of heat engines and direct conversion methods. Considers conservation and storage. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 340 |
| EGR | 480 | Advanced Statistical Approaches for Manufacturing | Applies experimental design and statistical process control in the manufacturing environment. Uses engineering statistical software to formulate and solve problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 280 and 302 |
| EGR | 481 | Enterprise Economics | All manufacturing is about cost. Considers the components of these costs and presents a number of mathematical tools and approaches for representing, understanding and making decisions based on them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 280 |
| EGR | 482 | Materials Science in Manufacturing | High-technology manufacturing combines and exploits the properties of a wide range of materials. Provides a science-based view of materials selection and optimization for product manufacturability and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisite(s): EGR 280; EGR 302 |
| EGR | 483 | Manufacturing Systems Operations | Introduces key factory management strategies, lean and six sigma philosophies, and global manufacturing supply chains. Software and computer model-based analysis and observation of factory and supply chain performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 382 |
| EGR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EGR | 485 | Engineering Internship | Experiential education. Local company oversees a student project experience at their facility. | N | PRA | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | Pre-requisite: EGR 302 |
| EGR | 486 | CNC Computer Programming | Theory and applications of NC languages using CAM software and CNC machine tools. Overview of advanced manufacturing processes including production CNC part programming ranging from current design to inspection standards. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 381 |
| EGR | 487 | Casting and Forming Processes | Theory and practice of metal casting processes and design of castings. Analysis of various forming processes to determine load requirements. Theory and practice of tooling design for stamping operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 218 or EGR 294 (Engineering Materials & Manufacturing) |

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| EGR | 488 | Plasma Processing | Plasma processing is widely used in advanced technology manufacturing. Combines the principles of chemistry, materials, RF power and control to demonstrate key applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 280 and 302 |
| EGR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EGR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EGR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EGR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 520 | Engineering System Design and Analysis | Develops a technical strategy to translate a user's operational needs into a physical solution to comply with specifications and requirements. Presents an approach for organizing, analyzing, designing, developing, verifying and validating systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 525 | Lean Systems | Creates a framework and model of lean engineering and a methodology for applying lean practices to systems engineering as a basis for lean product development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 530 | Principles of Systems Engineering | Engineering is increasingly about complex systems. Addresses scale, scope and complexity increase that engineers need to consider to bring together technical and social issues in a highly integrated way as they design flexible, adaptable, robust systems that can be easily modified and reconfigured to satisfy changing requirements and new technological opportunities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 520 |
| EGR | 535 | Engineering Innovation and Entrepreneurship | Provides knowledge of innovation and entrepreneurship practices and experience in the application of engineering systems innovation within an entrepreneurial setting of driving a product or process to successful launch. Includes protection of intellectual property and contractual relations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 570 | Capstone Design | Comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. Small-group project designing, building, evaluating and analyzing components, assemblies and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 530 |
| EGR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 515 | Structured English Immersion (SEI) Methods | Addresses the role of language and culture in teaching, program types, and specific SEI strategies for teaching English Language Learners (ELLs). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 516 | Advanced SEI Methods for ELLs | More fully prepares teachers for linguistically diverse classrooms in which there are students learning through SEI methodology. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ELS | 501 | Environmental Life Sciences: Grand Challenge: Global Climate Change | Introduces first-year graduate students to a range of fields related to the Environmental Life Sciences graduate program. Co-instructed by an interdisciplinary faculty team, combines overview lectures and active discussion of current literature in the fields of inquiry. Culminates in synthetic collaborative research proposals on topics that foster transdisciplinary approaches to environmental life science questions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 502 | Environmental Life Sciences: Field Camp | Combines lecture, field, and laboratory components; provides opportunities to develop field skills relevant to current questions in environmental life science, and to carry out a wide range of observations and measurements in natural systems. Instructed by an interdisciplinary faculty team. Travel out of the country is required and students need to be in possession of a valid passport. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: ELS 501 |
| ELS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| ELS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 501 | Sustainability Leadership Workshop I | Formally takes students into the four learning threads of the EMSL program and the ASU brand of sustainability. Hands-on collaboration and group time with peer cohort members, field trips and deep diving into discussion, and application of sustainability theories into real-world scenarios. Sustainability speakers and practitioners engage students in critical thought. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Executive Masters for Sustainability Leadership major |
| EMS | 502 | Global Context I | Leaders in any organization face an increasingly connected and transparent world where social and environmental issues must be weighed in everyday decisions. Explores iconic sustainability issues and trends and their impact on their organization, institutions, communities and stakeholders. Applies tools to identify the relevant risks and opportunities within their organizational context and investigates potential responses. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership major. Corequisite(s): EMS 503. Pre- or corequisite(s): EMS 501 |
| EMS | 503 | Strategic Sustainability I | Sustainability requires that strategic thinking reaches beyond traditional forms and horizons of strategic planning, such as forecasting and prediction, in order to deal with expanded planning dimensions, emerging "wicked problems" and to identify flexible platforms for success. Explores the interface between strategy and sustainability, developing a framework for strategic sustainability that underpins authentic and transparent strategic efforts. Students engage in mapping, planning and prioritizing methods, tools and techniques to identify and assess strategic opportunities. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership major. Corequisite(s): EMS 502. Pre- or corequisite(s): EMS 501 |
| EMS | 504 | Communications and Sustainability I | One of the greatest challenges for leadership in sustainability is multidisciplinary communications. Currently, sustainability itself lacks meaning and emotion, which leads to a lack of commitment and execution. Therefore, all future executives must be proficient communicators who can convey vision and human context to the organization's sustainability initiatives. Helps you survey your internal communications environment, understand students target audiences and their unique customer centricities and develops their voices through the use of proven story structure. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 505 |
| EMS | 505 | Sustainability Leadership I | The practice of leadership in sustainability requires leading in multidisciplinary roles across multiple scales of an organization. In many of today's organizations, leadership must identify, communicate and support novel organizational contexts as sustainability emerges. Enables students to meld powerful and traditional leadership skills while challenging the students' prior knowledge with multiple lens of leadership in a sustainability context. Students create a personal plan for their unique needs and personal growth toward sustainability leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 504 |

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| EMS | 506 | Global Context II | As material sustainability issues are identified and prioritized and as the organization applies sustainability as core success platform, the organization looks to mitigating risks outside of its control, shaping the risks it can control, and creating new opportunities and leveraging those identified in the process. Global context comes into focus not only in expanding resource relationships and concerns, but also across dimensions of time, responsibility, success and a growing need to engage with an ever-growing group of stakeholders and potential partners. Organizations and leaders must innovate and execute at all levels of the organization to match the evolving reality. Explores and applies global sustainability as a knowledge platform for ongoing success, organizational innovation and effective organizational leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505; Corequisite(s): EMS 507 |
| EMS | 507 | Strategic Sustainability II | As sustainability becomes a core strategic goal of any organization, it impacts all aspects of the organization from informing risk and reward to the definitions and dimensions of innovation and overall success. Uses reframing, re-visioning and back-casting via a sustainability lens as constructs for introducing strategic sustainability across all aspects of an organization—both internally and externally. Applies various methods such as natural capitalism, design for sustainability/method of sustainable product design, Anderson method, cradle-to-cradle and framework for strategic sustainable development to develop flexible action platforms for sustainable enterprises. Students create a strategic vision, action plan for an organization, including critical external partnerships with communities and institutions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505. Corequisite(s): EMS 506 |
| EMS | 508 | International Immersive | The international immersive experience takes place in a compelling location where all the challenges and opportunities of sustainability are in play. It is designed as a dynamic vehicle to make real-world connections to sustainability leaders, projects and communities, and is among the most memorable experiences of the program. Students "see" and "feel" sustainability from another country and culture's perspective and see the overlap and conflict to their own context. Extending one's professional network to other host countries and generating a reflective experience and analysis report are experiential learning artifacts that are generated from this experience. Collaborative teams work through a sustainability case study and present their solutions. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506, 507 |
| EMS | 509 | Communications and Sustainability II | Marketing and communication professionals in all industries are attempting to keep up with the rapidly expanding landscape of multichannel communications. This is especially true in sustainability, given that the Chief Sustainability Officer must understand and appreciate the modes of communications across all platforms, not just in the consumer market. Maps internal, external and target audiences/markets; strategizes channels to reach them with sustainability stories; and creates a multichannel communications plan that incorporates modes of engagement for all audiences. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506, 507. Corequisite(s): EMS 510. Pre- or corequisite(s): EMS 508 |
| EMS | 510 | Sustainability Leadership II | As sustainability emerges as a core strategic platform for an organization, leadership and sustainability intertwine; leadership opportunities—and responsibilities—greatly expand; thus requiring innovation. Individual leadership and organizational leadership are asked to find opportunity via extended definitions of critical systems; value webs, increased roles for diverse internal and external partnerships, and the need to lead within increasingly complex and unpredictable global systems. Engage students to challenge their prior definitions of systems, responsibility and community from the perspective of sustainability and leadership and provides a toolbox for leading with sustainability as a fundamental success platform. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506, 507. Corequisite(s): EMS 509. Pre- or corequisite(s): EMS 508 |
| EMS | 511 | Global Context III | Sustainability leaders help their organizations recognize when material issues require solutions that extend beyond their control or capabilities, and when to look for, participate in and potentially lead industry, cross-industry, regional or other collaborative approaches. Global sustainability context becomes an increasingly proactive concept where individual and organizational responsibility and success extends to a global scale. Organizations organize themselves as agents of change toward sustainability that aligns with more traditional organizational success. Students learn from successes and failures of current and past attempts and assess the implications for this change in leadership perspective to their organizational context. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 512 |

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| EMS | 512 | Strategic Sustainability III | Organizations that aim at sustainability come to recognize that they must be part of sustainable success on all scales, from local to global, from internal to external and for today and tomorrow. Tools such as resource plans, investment pathways, stakeholder engagement and policy influencers set the theatre for sustainability-oriented organization to challenge the status quo and advance agendas that embed both success and sustainability. Students apply their enhanced strategic sustainability skills to examine select case studies on international sustainability in corporate and nongovernmental agencies. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 511 |
| EMS | 513 | Communications and Sustainability III | Most stories of sustainability are driven and told with data as its central character. Unfortunately, data is nearly meaningless to our minds unless it is placed in an illuminating human context. The best chief sustainable storytellers bring meaning to data through the use of metaphor brought to life by thought-provoking narrative. Story grips the mind and propels people forward. Students develop proof of concepts for campaigns, expand social media presence and influence, create and record a 20-minute presentation in the style of a TedTALK, and become a leader in sustainable communications. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 514 |
| EMS | 514 | Sustainability Leadership III | Lasting, sustainable change fully takes hold once ownership and accountability extends well into the organization and community. Engages the student to identify and apply pathways to inspire, persuade and influence others to act toward a shared global vision. Future orientation, reframing organizations to be globally scalable and still be locally focused, leadership best practices for diverse, multinational, and international human talents and redefining success and growth using sustainability as a success lens are great tasks that sustainability leaders face. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 513 |
| EMS | 515 | Capstone I | Capstone project and gateway to starting innovative sustainability initiatives and thinking. Planning, components and deliverables of the capstone from the first in-person immersion in January. Students perform a proof of concept to show viability and applicability that serves as a springboard for postgraduation continuation of capstone project into their organizations; environments. The proof of concept also becomes the final component of the e-portfolio. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 513, 514 |
| EMS | 516 | Capstone II - Sustainability Leadership Workshop II | Develops a proof of concept based on project proposal and feasibility study. Requires a TED-style final project presentation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): EMS 515 |
| EMS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EN | 106 | Lit Apprec | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Department of English | 3 | | |
| EN | 584 | Internship | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Department of English | 3 | | |
| ENE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100IBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer 11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83IBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless taken prior to May 12, 2009, then score 8 or above) |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 111 | Learning Community Composition I | Discovering, researching, and developing ideas in relation to the writer's purpose, subject, and audience. Only taught within a Liberal Arts (CLAS) Learning Community. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100IBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 112 | Learning Community Composition II | Critical reading and writing; emphasis on rhetorical strategies of argumentation. Requires research paper. Only taught within a CLAS Learning Community. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 111 with C or better |
| ENG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ENG | 197 | Medical Writing | For students in the MedStart summer program. Designed to further critical thinking, reading, and writing skills for students interested in a medical career. | N | LEL | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): Literature, Writing & Film (BA, minor, certificate, BIS), Pre Sec Educ- English, Sec Ed- English, English major or minor (Linguistics, Literature or Creative Writing) or BIS with English emphasis; ENG 102, 105 or 108 with C or better |
| ENG | 201 | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 202 | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 204 | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 205 | Introduction to Writing, Rhetorics and Literacies | How do we understand the ways in which people in systems-- both small and large--social, political, and economic, throughout the world use language and other symbolic resources to carry out work? Three fields of study take this kind of questioning especially seriously: studies in writing, studies in rhetoric, and studies in literacy. Inquiry--that persistent, deliberate commitment to question and to build methods sufficient to that questioning--is a generative force in each of these fields of study. Familiarizes students with such questioning traditions and to help them judge for themselves what each is good for. The goal is to strengthen your own repertoire and decision-making power for producing and circulating work (widely defined across material, print, and digital media) that matters in our risk-ridden world. Quite simply, then, this is a course in asking good questions and in evaluating responses to situations that spur questioning. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 213 | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 214 | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 218 | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 219 | Newspaper Production | Students work on campus newspaper to learn basics of news and column writing, digital photography, and layout. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 228 | Introduction to Shakespeare | | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 228 or 294 (Shakespeare for Teachers) OR (Introduction to Shakespeare) |
| ENG | 229 | Love and Lust in Medieval Literature | The medieval period, roughly 600-1500, cannot reasonably be called the "dark ages." Indeed, the Middle Ages provides us with a corpus of literature replete with complex characters struggling to live and love, dealing with sin and lust, unity and diversity, faith and reason within a tumultuous cultural milieu and religious rigor, all of which are feeling the winds of changes. Explores medieval literature, noting the astonishing differences from our own time, as well as surprising similarities. Western civilization, our own 21st century, for better or for worse, is indebted to the love and lust of the medievals. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 229 or 294 (Love and Lust in Medieval Lit) |
| ENG | 230 | Introduction to Film Studies | Introduces the style and cultural significance of feature films. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 243 | Introduction to Writing Family History | Interdisciplinary writing course on theories, methodologies, and issues in writing family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 244 | Introduction to Researching Family History | Introduces research methods in family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 245 | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student; ENG 102, 105 or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 302 | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 303 | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 305 | Classical and Biblical Backgrounds to Literature | Selected readings from the Bible and Greek and Latin literature in translation, emphasizing ideas, forms, and myths related to the development of English literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 307 | Writing Science Fiction | Writing science fiction, primarily the short story. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 311 | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 312 | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 313 | Phonology and Morphology | Introduces English morphology, phonology, etymology, and phonetic aspects of rhyme, alliteration, and other sound-based literary devices. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 315 | Medieval Literature in Translation | Medieval literature (insular and continental) in translation, from Beowulf to Malory (excluding Chaucer), emphasizing cultural and intellectual backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| ENG | 317 | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 320 | Medievalism in Modern Culture | Studies the representation of Medieval narratives, characters, themes, myths, and images in modern culture. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 323 | Rhetoric and Grammar | Practical course taught in the computer lab. Emphasizes rhetorical strategies and grammar for writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 325 | Restoration and the 18th Century | Writers and movements in nondramatic literature of the restoration and early 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 326 | English Drama 1660-1800 | English drama 1660-1800. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 330 | 19th-Century British Poetry | Romantic and Victorian poets studied in context. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 331 | American Drama | Major works in the development of American drama from its beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 334 | The American Southwest in Literature and Film. | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 335 | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 338 | Protest Literature | Examines traditions of social protest literature across a variety of historical periods and literary and rhetorical genres. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, ENG 105, or ENG 108 with C or better; minimum 24 earned hours; credit is allowed for ENG 394 (Banned Literature), 338 or 440 (American Protest Novels) |
| ENG | 342 | 20th-Century British and Irish Literature | Major works in the development of literature since 1900, studied in their historical and cultural contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 344 | Intermediate Family History Research | How to locate records, analyze and interpret evidence, and write a family history narrative. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 345 | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 355 | European Dramatic Traditions | Development of European drama since Aeschylus. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 356 | The Bible as Literature | Readings in the Jewish and Christian Scriptures in modern translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 360 | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 361 | Scriptwriting | The art of scriptwriting using 10-minute plays as the platform. Designed to help students learn craft techniques and to expose them to the various forms of the 10-minute script. Includes lectures, writing assignments, discussion, and criticism. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): first-year composition; credit is allowed for only ENG 361 or 394 (Scriptwriting) |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 366 | Literature on Film | Studies literary texts and their adaptation to film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 367 | Environmental Issues in Literature and Film | Evaluates literary texts and films that address interconnected cultural, historical, and environmental issues. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 368 | Art of the Personal Essay | Writing personal essays drawing on both research and personal experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 369 | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 370 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; must have 35 or more earned hours; credit is allowed for only BIO 315 or ENG 370 |
| ENG | 371 | Rhetoric of the Environmental Movement | Examines how language is used to conceptualize, clarify/obfuscate, and resolve problems among those who concern themselves with the disposition of natural resources. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 372 | Document Production | Introduces document design and production. Practice in critique and in writing the content of publications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 373 | Publishing in Literary Magazines | Analyzes the history, publishing preferences, editorial staff, and submission guidelines of literary magazines. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 374 | Technical Editing | Fundamentals of editing technical and professional materials. Role of editors in analyzing, revising, and polishing manuscripts. Successful writer-editor dialogues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 375 | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 376 | Writing a Personal History | Interdisciplinary writing course emphasizing theories, methodologies, and issues of composing personal histories. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 377 | Editing Family History for Public Audiences | Fundamentals of editing family writing. Role of editors in analyzing, revising, and polishing manuscripts for publication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 378 | Environmental Creative Nonfiction | Lectures, discussion, and criticism concerning the literary history of nature writing and techniques of writing environmental creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 379 | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 382 | Digital Project Management for Humanities and Arts | Introduces Web design for the humanities; explores the use of the ADDIE process to create digital projects. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 383 | Digital Media in the Humanities and Arts | Introduction to the digital arts is an introduction to the emerging "new media" with emphasis on still imaging, audio, video, multimedia and the World Wide Web. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 385 | Career Development for English Majors | Theoretical and practical aspects of career planning related to skills and interests developed in English studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 386 | American Gothic | The development of modern American Gothic as a literary form from Poe to Oates. Emphasizes the short story. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 390 | Methods of Inquiry | Studies in writing, rhetoric and literacy are multiple and diverse because these areas deal with complicated ways people create meaning, circulate meaning, and understand meaning in a variety of contexts and a variety of modal formats. Examines ways of developing research problems and questions, designing studies and conducting, reading and evaluating research in the areas of writing, rhetoric and literacy. Qualitative methods (e.g., case study, ethnographic methods, interviewing); historical methods (e.g., archival, document analysis and artifact interpretation); rhetorical analysis and discourse analysis; feminist approaches to research and analysis; and recent advances in research in the fields of rhetoric, writing and literacy studies. Investigates the many attitudes and assumptions about creativity and cultural work that make methods of inquiry as controversial as they are significant to contemporary public life. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| ENG | 392 | History of Rhetorical Theory | Begins in ancient Greece with the rise of the art of public oratory (known as rhetoric) and ends in the present, an era dominated by mass media. Engages in a great deal of reading--lots of very old writings as well as some newer ones. Covers a great many topics and ideas; focuses by continually returning to the subject of public discourse. Challenging readings designed to emphasize the connection between systems of philosophy (or "worldview") and systems of communication. By focusing on big ideas, students become a better thinker and communicator in any chosen career. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 400 | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |

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| ENG | 401 | Topics in Critical Theory | Major critical schools of recent decades--postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 404 | Studies in Second Language Acquisition | Specialized topics in second language teaching and learning, including theory, pedagogy, curriculum, and assessment. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |
| ENG | 410 | Writing for Publication | Lectures and conferences concerning techniques of writing for publication. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 and one 200-level literature course with C or better, OR New College undergraduate student with minimum 45 hours |
| ENG | 411 | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | 412 | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | 413 | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | 414 | Studies in Linguistics | Specialized topics in linguistics including phonology, syntax, semantics, pragmatics, discourse, language variation, and change. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 416 | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Troilus and Criseyde. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | 418 | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| ENG | 421 | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 422 | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 423 | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 424 | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 425 | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 426 | British Culture and Empire | Examines British imperial culture in art and literature, 1870-1914, and postcolonial theory. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: One course in ARS, ENG, or HST at 200 level or higher with B or better |
| ENG | 427 | Studies in 18th-Century Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 428 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ENG | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| ENG | 430 | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 431 | Whitman and Dickinson | Evaluates the 19th-century American Literary Renaissance through the specialized examination of its poetry and authors in their historical context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 432 | The American Renaissance | Novels, poetry, short fiction, and criticism of the major literary figures of the early to mid-nineteenth century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 433 | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 434 | Studies in the Literature and Culture of the Americas | Literature and culture of North America, South America, and the Caribbean. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 435 | Literatures and Cultures of Immigration and Diaspora | Specialized topics in literary and cultural representations of immigration and diaspora studied in an interdisciplinary context. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: A 200-level ENG course with C or better; Minimum 56 hours |
| ENG | 436 | Studies in Anglophone Literature and Culture | Literary, social, and cultural issues of English-speaking former colonial territories. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 437 | The American Novel, 1900 - 1960 | Developments in theory and practice of major novelists. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 438 | American Novel Since 1960 | Major novelists of the period. Developments in theory and practice. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 440 | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 442 | Studies in 20th-Century British and Irish Literature and Culture | Major literary genres (novel, poetry, and drama) in their cultural and historical contexts. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 444 | Studies in American Romanticism | Fiction, poetry, and essays of such 19th-century authors as Hawthorne, Emerson, Melville, Thoreau, Fuller, Whitman, and Dickinson. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 445 | Studies in American Realism | Writers and influences that shaped the development of literary realism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 447 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200. Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| ENG | 448 | Studies in Irish Literature and Culture | Themes and problems pertaining to Irish literature, film, and social and cultural history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 450 | The British Novel | Focuses on the British novel from the 18th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 452 | Studies in the Novel | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 453 | Studies in the American Novel | Poetics and politics of the novel, 18th through 21st centuries. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 454 | Gender and Literature | Focuses on the representation of gender in literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 455 | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 457 | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 458 | Latino Literature | Development of Latino literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| ENG | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |
| ENG | 460 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Hispanic, and Asian American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 460 or WST 467 |
| ENG | 461 | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 462 | Africana Literature | Focuses on the literature of the African Diaspora, including texts from the Caribbean, the Americas, and Africa. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 463 | African American Literature | Thematic and cultural study of African American literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 464 | Great Directors | Studies the work of one or more influential directors. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 465 | Studies in Film | Advanced topics in cinema. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 466 | Studies in International Film | Studies non-American narrative film. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 467 | American Film Musicals | A cultural history of American film musicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 468 | Environmental Literary Criticism | Evaluates the disparate critical practices that constitute what is the emerging literary project known as "ecocriticism" or "environmental literary criticism." | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 469 | Science and Literature | Historical and theoretical links between science and literature, from Francis Bacon to the present, examined in cultural context. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 470 | Symbols and Archetypes in Children's Literature | Various critical approaches and recurring themes studied in relation to classical and contemporary children's literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 474 | Review Writing | Advanced writing course exploring rhetorical approaches to writing reviews. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Completed ENG 102, 105, or 108 with C or better. Minimum 56 hours |
| ENG | 475 | Popular Periodical Writing | Advanced writing course analyzing and imitating genres in popular periodical writing. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: Completed ENG 102, 105, or 108 with C or better. Minimum 56 hours |
| ENG | 476 | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 477 | World Literature | Readings in world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |

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| ENG | 478 | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 479 | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 481 | Methods of Teaching Secondary Writing | Emphasizes methods of planning, teaching, and assessing appropriate content in the instruction of composition and related skills in secondary classrooms. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG 481 or 581 |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 483 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 485 | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better |
| ENG | 486 | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) |
| ENG | 487 | Advanced Creative Writing Workshop in Poetry | Advanced writing of poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 387 (Poetry) with C or better; Credit is allowed for only ENG 411 (Poetry) or 487 |
| ENG | 488 | Advanced Creative Writing Workshop in Fiction | Advanced writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 388 (Fiction) with C or better; Credit is allowed for only ENG 411 (Fiction) or 488 |
| ENG | 489 | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course |
| ENG | 490 | Literary Forms: Theory and Practice in Poetry | Types, history, analysis of traditional forms, and contemporary adaptations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 487 (Poetry) with C or better; Credit is allowed for only ENG 490 or 495 (Poetry) |
| ENG | 491 | Literary Forms: Theory and Practice in Fiction | Types, history, analysis of traditional forms, and contemporary adaptations. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 488 (Fiction) with C or better; Credit is allowed for ENG 491 or 495 (Fiction) |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 495 | Literary Forms: Theory and Practice | Types, history, analysis of traditional forms and contemporary adaptations. Separate sections for poetry, fiction. Each genre may be taken once. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 411 with C better |
| ENG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 502 | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 503 | Comparative Ethnic Studies, Theory and Practice | Problems, methods, and principles of comparative analysis, illustrated by selected critical essays and literary-cultural texts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 504 | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 505 | Writing Workshops | Intense poetry and fiction workshops for experienced writers, emphasizing individual style. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 506 | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 507 | Methods and Issues in Teaching Composition | Up-to-date theory, practice, and implementation of secondary writing instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Credit is allowed for only ENG 480 or 507 |
| ENG | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| ENG | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional contexts as well as the characteristics of different types of students and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)/Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| ENG | 530 | Old English | Study of Old English grammar, syntax, and phonology, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 531 | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 532 | Middle English Dialects | Study of the principal dialects of Middle English, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 533 | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 534 | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 535 | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 536 | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 537 | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 538 | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 539 | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 540 | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student: degree or non degree; Students who have credit for ENG 471 may not enroll in ENG 540 |
| ENG | 542 | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 543 | Studies in Anglophone Literatures | Selected topics, texts, periods, literary trends in works by world authors writing in English. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 544 | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 545 | Studies in Women's Literatures | Selected topics, texts, periods, and figures in works written by and/or about women, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 546 | Gender Studies | Selected topics, periods, and themes in the study of gender and sexuality, including attention to theoretical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 550 | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 551 | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 552 | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 553 | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 554 | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 556 | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |
| ENG | 560 | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 561 | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 562 | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 563 | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 581 | Methods of Teaching Secondary Writing | Emphasizes methods of planning, teaching, and assessing appropriate content in the instruction of composition and related skills in secondary classrooms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only ENG 481 or 581 |
| ENG | 583 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 597 | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 602 | Advanced Studies in Theory and/or Criticism | Seminar courses on the principles, strategies, and applications of critical, cultural, and/or literary theory and/or criticism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 603 | Advanced Studies in Comparative Literature | Seminar courses on the problems, methods, and principles of comparative analysis. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 604 | Interdisciplinary Cultural Studies | Seminar courses on work from literature, anthropology, and/or other disciplines, with an emphasis on cultural influences and functions. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 606 | Advanced Studies in English Education | Current research, issues, and trends in English education. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing—an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ENG or LIN 625 |
| ENG | 632 | Advanced Studies in Medieval and Renaissance Literature and Culture | Seminar in works of the Medieval or Renaissance periods, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 635 | Advanced Studies in British Literature | Seminar courses on works produced in or about England, Scotland, and Wales, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 636 | Advanced Studies in American Literature | Seminar courses on works produced in or about the United States, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 639 | Advanced Studies in Modernism and Postmodernism | Seminar courses on topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 642 | Advanced Studies in Ethnic, Anglophone, or Post-Colonial Literatures | Seminar courses that consider the influence of cultural or geopolitical developments on the production and circulation of texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 645 | Advanced Studies in Gender Issues | Seminar courses that consider the influence of gender on the production and circulation of texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 651 | Advanced Studies in History and Theories of Rhetoric | Selected topics in the history and/or theory of rhetoric. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 652 | Advanced Composition Studies | Selected topics on particular composition theories, practices, pedagogies, and figures. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 654 | Advanced Studies in Rhetoric, Writing, Technology, and Culture | Advanced study of theoretical, methodological, and pedagogical issues concerning the interrelationships among rhetoric, culture, writing, and writing technologies. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to English studies. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 655 or LIN 655 |
| ENG | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 661 | Advanced Studies in Film | Seminar courses on topics, genres, and figures in film studies, including technical and theoretical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 662 | Poetic Genres | Creative writing courses in the long poem, the erotic image, death and transfiguration, reading and influence, and others. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 663 | Fiction Genres | Creative writing courses in time and fiction, gothic fiction, myth in fiction, science fiction, and others. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 664 | Mixed Genres | Creative writing courses in the prose poem, magical realism, the literature of obsession. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 665 | Creative Methods | Creative writing courses in theory of the novel, poetics, story into film, and others. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 667 | Issues in the Writing Professions | Focuses on career preparation, resources, the role of writing in the community, creative writing, and the Internet. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score ≥60PBT/250CBT/100IBT or higher; IELTS score ≥6.5; ACT ENG score 19 or higher; SAT Verbal score ≥470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score ≥60PBT/250CBT/100IBT or higher; IELTS score ≥6.5; ACT ENG score 19 or higher; SAT Verbal score ≥470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |

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| ENG | | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83BT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83BT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ENG | | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): Literature, Writing & Film (BA, minor, certificate, BIS), Pre Sec Educ-English, Sec Ed-English, English major or minor (Linguistics, Literature or Creative Writing) or BIS with English emphasis; ENG 102,105 or 108 with C or better |
| ENG | | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): Literature, Writing & Film (BA, minor, certificate, BIS), Pre Sec Educ-English, Sec Ed-English, English major or minor (Linguistics, Literature or Creative Writing) or BIS with English emphasis; ENG 102,105 or 108 with C or better |
| ENG | | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |

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| ENG | | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | | The American Southwest in Literature and Film. | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | History of Film | Development of motion pictures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | History of Film | Development of motion pictures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |
| ENG | | Topics in Critical Theory | Major critical schools of recent decades--postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Trolous and Criseyde. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better | |
| ENG | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) | |
| ENG | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course | |
| ENG | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student | |
| ENG | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student | |
| ENG | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student | |
| ENG | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student | |
| ENG | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better | |
| ENG | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student | |
| ENG | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student | |
| ENG | Comparative Ethnic Studies, Theory and Practice | Problems, methods, and principles of comparative analysis, illustrated by selected critical essays and literary-cultural texts. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student | |

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| ENG | | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Graduate student: degree or non degree; Students who have credit for ENG 471 may not enroll in ENG 540 |
| ENG | | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Anglophone Literatures | Selected topics, texts, periods, literary trends in works by world authors writing in English. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Studies in Women's Literatures | Selected topics, texts, periods, and figures in works written by and/or about women, studied in their cultural contexts. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Gender Studies | Selected topics, periods, and themes in the study of gender and sexuality, including attention to theoretical issues. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Methods of Teaching Secondary Writing | Emphasizes methods of planning, teaching, and assessing appropriate content in the instruction of composition and related skills in secondary classrooms. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only ENG 481 or 581 |
| ENG | | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |

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| ENG | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| ENG | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| EPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 532 | Becoming an Informed Consumer of Educational Research | Development of critical analyses skills in the examination and synthesis of educational research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: EPA 555 |
| EPA | 555 | Translating Research for Educational Change | Teaches educators how to translate research to promote educational change in their schools and districts. Three concepts emerge to empower practitioners to translate research to their individual schools and communities: (1) a needs assessment to understand the context (student population, community, networks); (2) an emphasis on the generalizability of research to provide an understanding of which findings are most applicable to specific contexts at which times and under which conditions; and (3) explicit training on ways of knowing to encourage practitioners to develop their own theoretical perspectives and test them against the academic research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 556 | Data Analysis for Education Decision Makers | Prepares educators to use the sources of information (i.e., results, reports and interactive programs) at their disposal to make educational decisions. Dynamic content is adapted based on the real-world information sources brought forth by the course participants. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 559 | Systematic Inquiry for Problem Solving | Trains participants to produce a policy analysis aimed at addressing a problem they identify within their own organizations. Participants identify a problem, gather, analyze data and evidence to draw conclusions, and clearly and succinctly report their findings and recommendations to policymakers. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 565 | Critical Topics in Education Policy | Critical topics in contemporary educational policy debates in the USA. Explores the dominant ideological and theoretical perspectives about what should be the purposes of schooling. Students analyze the humanist, core-curriculum, vocational, pragmatic as well as the standards-based, market-driven, professionally led, and networked models of reform, theories of change, implementation challenges, and the critiques leveled against these approaches. Students analyze critical topics such as policy formation, leadership, teachers unions, academic performance and community involvement. Encourages students to learn critical "policy skills" and reach reflexive and research-based conclusions about what are the requirements to develop "good school systems" and what their individual and collective contributions could be. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |

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| EPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |
| EPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 795 | Continuing Registration | | N | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Pre-requisite: EPD 710, 712 or 714 with C or better |
| EPD | 710 | Current Research in Design | Review and critical evaluation of contemporary literature and research in design, environment and the arts. | N | SEM | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisite: Design, Environment and the Arts PHD OR Design, Environment and the Arts (Digital Culture in Design) PHD OR Environmental Design and Planning PHD OR Environmental Design and Planning (Healthcare and Healing Environments) PHD |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EPD | 712 | Current Research in Planning | Review and critical evaluation of contemporary literature and method in environmental planning, landscape ecology, urban design, and urban and regional planning. | N | SEM | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisite: PhD in Environmental Design & Planning student |
| EPD | 714 | Current Research in History, Theory, and Criticism | Review and critical evaluation of contemporary literature and method in the theory and history of architecture, design, and planning. | N | SEM | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisite: PhD in Environmental Design & Planning student |
| EPD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 301 | Environmental Management | Focuses on knowledge and skills necessary to manage environmental programs. Perspectives include regulatory, individual, corporate, and consulting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 302 | Water and Wastewater Treatment Technology | Explores the development of treatment technologies. Addresses regulatory standards. Emphasizes theory and practice of system design, lab analysis standards and procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101; MAT 170, or MAT 210 |
| ERM | 303 | Environmental Regulations | Explores environmental laws, regulations, and directives. Addresses air, land, and water. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 364 | Toxicology and Biohazards in Emergency Management | Introduces poisons. Dose response routes of exposure and toxicokinetics. Diseases associated with natural disasters. Clinical presentation of treatments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 401 | Hazardous Waste Management | Definition of hazardous waste. RCRA and CERCLA regulations, hazardous waste classification system. Overview of hazardous waste management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 402 | Unit Treatment Technologies | Addresses various treatment technologies for contaminated air, water, and soil. Emphasizes design based upon medium, type of contamination, and concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): CHM 101 (or 113); MAT 170 or higher |
| ERM | 406 | Environmental Chemistry | Examines reactions, transport, and fates of hazardous chemicals in water, soil, air, and living organisms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101 (or 113) and MAT 170 or higher |
| ERM | 407 | Occupational Hygiene | Overview of occupational health hazards, including recognition, evaluation, and control. Includes regulatory status and health standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 426 | Environmental Issues | Explores the science and policy implications of contemporary problems that threaten the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 428 | International Environmental Management | Emphasizes technological and economic pressures experienced by developing countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | |
| ERM | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only ETM 480, GIT 480 or TMC 480 |
| ERM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| ERM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |

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| ERM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | |
| ERM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 501 | Principles of Hazardous Materials and Waste Management | Foundation for courses in curriculum. Topics include definitions of toxic and hazardous substances and wastes, RCRA classification, and OSHA criteria. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 502 | Regulatory Framework for Toxic and Hazardous Substances | Examines federal, state, and local regulations for hazardous materials and wastes. Includes history and trends in regulatory development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 503 | Principles of Toxicology | Interaction of chemicals with life and environment. Mechanisms of toxic action, dose-response relationships, toxicity testing models, predictive toxicology, and epidemiology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 504 | Technology for Storage, Treatment, and Disposal of Hazardous Materials | Current and state-of-the-art technologies and future trends for storage, treatment, and disposal of hazardous materials and waste. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 505 | Quantitative Analysis and Practical Laboratory Techniques | EPA methodologies for sampling and analysis of soils and water. Includes quality assurance and regulatory requirements. Lab is arranged off site. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 506 | Chemistry of Hazardous Materials | Chemistry and toxicology of hazardous chemicals. Topics include proper handling, storage, transportation, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 507 | Industrial Hygiene | Emphasizes chemical hazards in industrial settings. Topics include recognizing and measuring hazards, control techniques, and regulatory standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 520 | Sustainability and Sustainable Development | Explores broad field of environmental sustainability with U.S. and international coverage of green living practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 522 | Air Pollution and Toxic Chemicals | Examines issues in the measurement analysis and control of toxic chemicals in air pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 523 | Soils and Groundwater Contamination | Theoretical and practical hydrogeology as it applies to cleaning up contamination. Investigative techniques, monitoring, risk assumptions, and assessment methodology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 525 | Risk Assessment for Hazardous Materials | Applies the risk assessment process in situations ranging from hazardous facilities regulation to toxic substances in the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 526 | Current Environmental Technology Issues | In-depth study of current issues in environmental technology facing both the private and public sectors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 527 | Environmental/Resources Regulations Concepts | Develops environmental regulations from common law to statutory requirements. Emphasizes Superfund, hazardous materials, toxics, and liability contracts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 528 | International Environmental Management | Studies environmental issues and laws outside the U.S., impact of free trade, and multinational corporations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 540 | International Environmental Law and Policy | Studies international environmental agreements, enforcement mechanisms, and the role of NGOs and international organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 501 | Social Theory and the Environment | Investigates key conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ESS | 502 | Political Ecology: Theory and Research | Investigates key theories and research of political ecology through the conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 510 | Urban Environments | Investigates major issues and themes on the urban environment, from urban sprawl to environmental justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 513 | Institutions | Studies formal and informal institutional arrangements for the governance of natural resources using case studies, experiments, and formal models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only AML, ESS or SOS 540 |
| ESS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ESS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EST | 115 | Digital Systems I | Introduces digital electronics. Topics include number systems and codes used in digital systems, Boolean algebra, logic gates, logic families, and combinational and memory circuits. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EST | 160 | Introduction to Electronic Systems | Introduces the components, devices, and practical design principles that are used to create competitive electronic systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EST 160 or 194 (Intro to Electronic Systems) |
| EST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 200 | Project Lab | Provides theoretical and practical overview of principles of measuring instruments and the main objective is to build good lab disciplines. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | Pre-requisites: Sophomore standing |
| EST | 210 | Circuit Analysis I | Parallel/series circuits, ohm's law, network theorems, capacitors/inductors and transient analysis. Overview of electronic devices, BJTs, FETs, op-amps. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MAT 266 (or 271); PHY 112 (or 131) |
| EST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 310 | Circuit Analysis II | Electronic device analysis and introduction to design. Power supplies, diode circuits, FETs, BJTs, op-amps. Emphasizes frequency response. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210 |
| EST | 315 | Digital Systems II | Digital electronics systems, HDL circuits and systems design techniques, and device applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 115 and 210; Credit is allowed for only EST 315 or 394 (Digital Electronics II) |
| EST | 345 | Planning and Delivering Engineering Projects | Project-based, hands-on course teaches team building, planning, soft skills, tracking progress, and powerful methods that deliver successful, on-time projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200 |
| EST | 350 | Microcontroller Applications | Interfacing of microcontrollers to sensors, switches, indicators, and other human interfaces using the C programming language. Applications involve the integration of both hardware and software. Also addresses applications dealing with open- and closed-loop applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 315; Credit is allowed for only EST 350 or 394 (Adv Micro Controllers) |
| EST | 370 | Sensors | Overview of sensor technology, including mechanical, magnetic, radiation, thermal, chemical, and biological applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200; EST 210; UET 331 |
| EST | 372 | Wireless Communication Systems | Components and signal processing for modern wireless communication systems, including major applications, problems, and new technologies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: EST 310 |
| EST | 380 | Electronic Devices | Covers materials, structures, and technology for the design, production, and application of the major categories of electronic devices. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331; Credit is allowed for only EST 380 or 394 (Intro to Electronic Devices) |
| EST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 410 | Electronic System Design | Analysis and design of Op-amps, power amplifiers, and digital logic families. Feedback design using frequency response. Computer analysis and design. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 310; Credit is allowed for only EST 410 or 494 (Electronics Systems Design) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EST | 465 | Statistical Process Control | Introduces statistics, seven QC tools, and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, and quality system. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Senior standing; Credit is allowed for only EST 465, 494 (Statistical Process Control) or 565 |
| EST | 470 | Capstone Design I | Small-group projects designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 345; EST 370; EST 372 |
| EST | 471 | Capstone Design II | Continuation of a small-group project encompassing designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 470 |
| EST | 482 | Industrial Practice: Internship/Co-Op | Specially assigned or approved activities in electronic industries or institutions. Requires report. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Pre-requisites: Undergraduate Technology and Innovation or Fulton Engineering student; min GPA 2.25; OR Technology and Innovation or Fulton Engineering graduate student |
| EST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EST | 490 | Electronics Project | Individual or small group projects in applied electronics; emphasizes lab practice or hardware solutions to practical problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Fulton Polytechnic School graduate student; minimum 15 hours graduate level courses |
| EST | 565 | Statistical Process Control | Seven QC tools and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, quality system, case study and lab experiment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree seeking or nondegree seeking) student; Credit is allowed for only EST 465, 565 or 598 (Statistical Process Control) |
| EST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Pre-requisites: MS in Technology graduate student |
| EST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | | Capstone Design II | Continuation of a small-group project encompassing designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 470 |

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| ETH | 100 | Introduction to Ethnic Studies | Undertakes an introductory comparative analysis of ethnic groups to understand cultural diversity within the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | |
| ETH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 300 | Principles of Ethnic Studies | Familiarizes students with a range of analytical and theoretical frameworks in the field of ethnic studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | C | |
| ETH | 310 | Critical Research Methods | Examines methodological approaches common to programs in such disciplines as American Studies, Ethnic Studies, and Women's Studies. Critical qualitative, historical, archival, and feminist methodological approaches to the study of diverse United States populations comprise the focus of this course. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisite: Minimum 40 hours |
| ETH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ETH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| ETH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| EVO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 494 (Emerging Infectious Diseases), EVO 520 or MIC 520 |
| EVO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 601 | Principles of Evolution | Introductory course for graduate students; covers the principles of evolutionary biology from theoretical, empirical, and historical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 610 | Research Areas of Evolution | Broadly conceived description of the current research areas of evolutionary biology. Expected of all first-year evolution students. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EVO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| EXW | 105 | Physical Activity Instruction: Beginning | Beginning instruction in a variety of physical activities such as aerobics, aquatics, racquet sports, physical conditioning, and golf. Y grade only. May be repeated for credit. 2 hours per week. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 194 | Special Topics | | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 212 | Instructional Competency Laboratory | Methods of instructing and leading fitness activities including aerobic, resistance, and flexibility activities. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major |
| EXW | 214 | Flexibility Instructional Competency Laboratory | Science and methods of instruction related to flexibility exercises and activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major. |
| EXW | 215 | Physical Activity and Healthy Lifestyles | Applies principles of physical activity to personal fitness testing and program planning for people of all ages. Telecampus course. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Non-EXW students; Credit is allowed for only EXW 215 or EXW 325 |
| EXW | 216 | Muscular Strength Instructional Competency Laboratory | Science and methods of instruction related to resistance training and muscular strength activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Exercise and Wellness or Physical Education major |
| EXW | 218 | Cardiovascular Instructional Competency Laboratory | Science and methods of instruction for cardiovascular exercise and fitness activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisite: Exercise and Wellness or Secondary Education (Physical Education) major |

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| EXW | 284 | Exercise and Wellness Preinternship | Professional development course designed to help students prepare for their respective senior-year internships and post-graduate career fields, while developing and enhancing professional practice skills. Students engage in individual assessment and group learning with student peers through activities such as required readings and self assessments, career-related exploration assignments and networking. Utilizes on-campus resources, such as Career Services and the Writing Center, for support and assistance with course work and assignments. Focuses on developing long-term professional and interpersonal competencies career preparation, professional self marketing, and workplace professionalism. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 290 | Foundations of Health Promotion and Wellness | Introductory analysis of the roles, responsibilities and theories of professional fields of study related to health promotion, physical activity, fitness and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre/Co-requisites: EXW 100 or KIN 100; Minimum 30 earned hours |
| EXW | 302 | Fundamentals of Wellness | Overview of fundamental health, exercise and wellness concepts. Emphasizes personal wellness assessment and application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | |
| EXW | 310 | Computer Skills and Technology for Exercise and Wellness | Applies computer technology to principles of social marketing, tailored communication, e-health consumerism, and statistical analysis. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: Exercise and Wellness student; MAT 114, 117, 119, 142 or 170 with C or better |
| EXW | 311 | Special Populations in Exercise and Wellness | Introduces the challenged population and surveys the agencies that work with special populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 315 | Physiological Foundations of Movement | Studies human movement with emphasis on physiological function of the body in response to physical activity and fitness training. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 316 | Physiological Foundations of Movement Laboratory | Investigates theories and methods of exercise physiology in a laboratory and/or applied setting. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s) with C or better: BIO 201, 202. Corequisite(s): BS Exercise and Wellness major: EXW 315 |
| EXW | 320 | Management and Leadership in Exercise and Wellness | Studies management, leadership, legal, ethical, and programmatic theories and applications in fitness and wellness settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 102, 105 or 108; Minimum 30 hours |
| EXW | 322 | Spa Management I | History of the spa industry. Overview of different types of spas, spa programs and services, facilities and equipment, operational procedures and systems, the wellness component of spas, and computer applications in spa operations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | |
| EXW | 325 | Fitness for Life | Analyzes physical fitness and benefits of exercise with emphasis on application of strategies for fitness and wellness evaluation, behavior change, and lifelong program planning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 101; Minimum 30 hours |
| EXW | 330 | Kinesiological Foundations of Movement | Study and consideration of human movement with emphasis on kinesiology principles and their application to movement and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: BIO 201 with C or better |
| EXW | 335 | Physical Activity and Fitness Concepts | Topics are designed for the physical activity and health education professional and focus on application of basic exercise physiology and nutritional concepts in the design and implementation of exercise and physical activity programs to increase physical function and improve health risk factors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 342 | Health Behavior Change | Examines major theories of health behavioral change. Develops intervention strategies and techniques employed to facilitate health behavioral change. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101); minimum hours 45 |
| EXW | 344 | Physical Activity in Health and Disease | Examines the role of physical activity and fitness in the development of morbidity and mortality throughout the human life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202; Pre/Co-requisite: EXW 290 (EXW 300) |
| EXW | 348 | Methods of Health Education | Intended for the pre-professional health educator to learn how to develop sound, effective, and appropriate presentation methods to create learning experiences that facilitate voluntary changes leading to health-enhancing behaviors. Focuses on the knowledge and skills necessary to understand learning and the diverse learner; structure the learning environment; develop appropriate behavioral learning objectives; select appropriate instructional methods; and develop quality lesson, presentation, and unit plans with sound strategies for evaluating learning. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre/Co-requisites: COM 225; EXW 290 (EXW 300) |
| EXW | 350 | Substance Abuse and Addictive Behavior | In depth study of the pharmacology and effects of addictive substances and the psychosocial risk factors and consequences of substance abuse. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; BIO 202; PSY 101 (PGS 101) |
| EXW | 380 | Body Image and Wellness | Explores body image in American culture from physical, psychological, historical, and societal perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| EXW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 400 | Stress Management for Wellness | Examines the stress response and management from a behavioral perspective as it pertains to individuals or groups. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202; PSY 101; 45 minimum hours |
| EXW | 410 | Obesity Perspectives and Prescriptions | Provides a structure for understanding, critiquing and synthesizing the information and misinformation about obesity, weight loss and health. Explores topics: the obesity epidemic; health consequences of obesity; fitness and fatness; etiology of weight gain; health implications of weight loss; psychological, cultural, social and political considerations of obesity; and a review of the application of prevention and treatment of obesity. Examines a wellness perspective about obesity by considering obesity as a normal physiological response within a pathological environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BIO 202; PSY 101. Credit is allowed for only EXW 410 or EXW 494 (Obesity Perspectives and Prescriptions)Pre-req for EXW 410 |
| EXW | 420 | Exercise Testing | Theoretical basis and practical application of pre-exercise screening, exercise testing, estimates of energy expenditure, and interpretation of results. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: EXW 214, 216, 218 and 315 with C or better |

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| EXW | 425 | Exercise Prescription | Theoretical basis for and application of general principles of exercise prescription to various ages, fitness levels, and health states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 214, 216, 218, 315, and 330 with C or better; Pre/Co-requisites: EXW 420 with C or better if completed |
| EXW | 436 | Community Health | Applies major concepts of community health. Focuses on populations, settings and social issues related to community health. Basics of epidemiology, disease prevention, and health promotion. Explores community health concepts related to organizing and building community coalitions and health programs. Also explores school health, maternal, infant and child health, minority health, and environmental influences on community health. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290 (EXW 300) and 342 with C or better |
| EXW | 444 | Epidemiology | Introduces epidemiological concepts and prepares the student to read, comprehend, and report epidemiological research. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290; Any CS statistics course with C or better |
| EXW | 446 | Health Promotion and Program Evaluation | Applies theory-based concepts and methods of health promotion and program evaluation. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290 (EXW 300) with C or better; EXW 342 with C or better |
| EXW | 450 | Social Determinants of Health and Health Behavior | Examines the social determinants (e.g., early childhood, family, schools, worksites, built and food environments, and socio-economic status) of health and health behavior, particularly physical activity behavior and eating. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | (L or SB) & C | Pre-requisites: PSY 101 (PGS 101) with C or better; EXW 290 (EXW 300) with C or better |
| EXW | 454 | Health Promotion Program Planning and Implementation | Applies theory-based concepts and methods of health promotion (HP). Covers selected topics in HP across a variety of domains of health. Program planning concepts include the use of planning frameworks, needs assessments, and the use of theory in health promotion program planning. Also covers practical issues related to health promotion program implementation such as resource management and program marketing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290 (EXW 300); EXW 342; Pre/Co-requisite: EXW 444 with C or better if completed |
| EXW | 456 | Health Promotion Program Evaluation | Covers program evaluation concepts including how to plan an evaluation, how to analyze and interpret data, and how to report evaluation results. Students learn a basic framework for conducting a program evaluation, various research/evaluation designs, and data analysis and statistics. Topics are covered in enough detail so that the student may understand how inferences are made regarding program evaluation. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 444; Pre/Co-requisite: EXW 454 |
| EXW | 460 | Resistance Training Application and Theory | Fosters critical thinking as it applies to resistance training theory. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 216 and 315 with C or better |
| EXW | 466 | Health Promotion Program Management and Administration | Uses a dynamic team process to build knowledge and skills for the effective administration of health promotion program proposals. Areas of emphasis are strategic planning, managing fiscal resources, demonstrating leadership, developing human resources, facilitating community partnerships, formative and summative evaluation. Aligns with specific objectives required for the Certified Health Education Specialist offered by the National Commission for Health Education Credentialing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 454; Pre/co-requisite: EXW 456 |
| EXW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisites: Exercise & Wellness concentration students: EXW 400, 420 and 425 with C or better or Health Promotion concentration: EXW 348 and 456 with C or better or Health Education and Health Promotion major with EXW 348, 454 and 456; 2.00 GPA |
| EXW | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| EXW | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EXW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |
| EXW | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 501 | Research Statistics | Statistical procedures; sampling techniques, hypothesis testing, and experimental designs as they relate to research publications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 534 | Sports and Fitness Conditioning | Bases of sports and fitness conditioning, including aerobic and anaerobic power, strength, flexibility, and analysis of conditioning components for sports and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 535 | Advanced Exercise Assessment and Prescription | Theory and practice of laboratory methods in applied exercise physiology. Procedures for assessment and prescription for individuals with chronic disease. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 536 | Physiological Aspects of Physical Activity and Chronic Disease | Role of physiological mechanisms associated with acute and long-term physical activity and its influence on chronic disease and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 538 | Obesity, Exercise and Health | Critically examines scientific and medical evidence concerning obesity, exercise, and health across the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EXW | 542 | Health Promotion | Theory and research concerning fitness and wellness programs in nutrition, physical activity, smoking cessation, and stress management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 544 | Fitness/Wellness Management | Development of the fitness/wellness industry. Planning, organizing, promoting, and managing fitness/wellness programs. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 560 | Cardiopulmonary Rehabilitation | Exercise testing and prescription for cardiac and pulmonary patients as well as pharmacology, electrocardiography, pathophysiology of chronic diseases, and leadership of patients in cardiac rehabilitation and pulmonary rehabilitation programs. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 562 | Functional Assessment and Exercise Prescription for Older Adults | Assessment of functional capacity and prescription of exercise that is appropriate for older adults including healthy, frail, diseased and very old. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS Clinical Exercise Physiology or Exercise and Wellness major |
| EXW | 564 | Aging and Lifestyle Behaviors | Provides an overview of health behaviors in older adults. Centers on the perceptions and behaviors of older adults in reference to illness prevention, health promotion and reactions to acute and chronic illness and the context in which these behaviors occur. Specifically examines the psychological, familial, cultural and contextual factors which influence older adults' personal health practices and illness behaviors. Considers the older person as an individual in a complex system, engaged in decision making and his/her subsequent actions to maintain or improve health status. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 542 |
| EXW | 565 | Cardiovascular and Pulmonary Physiology | In-depth study of the physiology of exercise with special regard to cardiovascular and pulmonary responses in healthy and chronically diseased individuals. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS in Clinical Exercise Physiology major |
| EXW | 568 | Management and Treatment of Chronic Disease for the Clinical Exercise Physiologist | Investigates the physiology, pathophysiology and treatment options for a variety of diseases that the clinical exercise physiologist routinely encounters in the work environment. Prepares students to qualify for ACSM Clinical Exercise Physiologist certification. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 560 |
| EXW | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 597 | Capstone Project | For non-thesis students in the MS degree program to provide a culminating field experience or non-research project for students to apply the coursework and healthy aging concepts. | N | RSC | N | YGB | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 500, 501, 536, 542 and 591 |
| EXW | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 635 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 640 | Analysis of Variance for Exercise and Wellness | Analyzes variance methods with an emphasis on research measures of human performance. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 641 | Qualitative Research Methods | Introductory overview of qualitative research methods frequently used in education and health. Emphasizes analysis of research and practical application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 642 | Exercise Epidemiology | Physical activity, exercise, and physical fitness and the development of chronic disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 500 with C or better; EXW 501 with C or better |
| EXW | 643 | Correlation/Regression/Multivariate Statistics | Graduate-level statistics course for PhD/master's students who will be doing research in the area of exercise and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 645 | Biostatistics in Physical Activity, Nutrition, and Wellness | Introduces biostatistical methods in physical activity, nutrition, and health promotion. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EXW | 701 | Advanced Research Methods | Provides doctoral students in Nutrition and Health Promotion with instruction in methods to enhance scientific writing skills in the health sciences and guidance through the process required to organize and submit a fundable research grant proposal. | N | SEM | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 700 |
| EXW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| FAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Pre-requisite: ENG 101, 105, 107 or 111 with C or better |
| FAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 301 | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS or SOC 324 |
| FAS | 331 | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 360 | Black Families in the Diaspora | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| FAS | 361 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: SOC 101 (or SOC 301 or CDE 232) and SOC 390. Credit is allowed for only FAS 361 or SOC 391 |
| FAS | 370 | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | 390 | Supervised Research Experience | Practical, firsthand experience within current faculty research projects in family studies or child development. Y grade only; may be repeated for total of 6 hours. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 421 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). Credit is allowed for only ALD 431, 531 or FAS 421 |
| FAS | 431 | Parent-Adolescent Relationships | Dynamics of the relationships between parents and adolescents. Developmental characteristics of adolescence and the corresponding adult stage. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 331 with C or better; Credit is allowed for only SOC or FAS 435 |
| FAS | 436 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 440 | Fundamentals of Marriage and Family Therapy | Introduces the fundamental orientations of marriage and family therapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 445 | Social Policy and Aging | Critical analysis and evaluation of the historical, socio-political, and economic issues that are specific to older Americans. Includes federal, state, and local policy issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FAS | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| FAS | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| FAS | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| FAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |
| FAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEL | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 503 | Academic Professional Development | Becoming and working as a academic, including how to write a vita, choose a thesis topic, or find dissertation data. | N | REC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 505 |
| FAS | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 507 |
| FAS | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling, Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. Projects involve conducting analyses and writing results. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 508 |
| FAS | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 509 |
| FAS | 512 | Secondary Data Analysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 512 |
| FAS | 531 | Theoretical Issues in Family Sciences | Historical and current approaches to theory development, evaluation, and application in family studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 539 | Research Issues in Family Interaction | Critical review of current and past research in the area of family dynamics. Emphasizes interactional processes within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 570 | Introduction to Marriage and Family Therapy | Introduces major marriage and family therapy orientations. Reviews history, theory, application, and outcome research for each orientation. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 571 | Assessment in Marriage and Family Therapy | Assessment and outcome evaluation of couples and families involved in marital and family therapy. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 572 | Advanced Techniques in Marriage and Family Therapy | In-depth review of assumptions and advanced techniques associated with contemporary marriage and family therapy approaches. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 573 | Dysfunctional Families | Critical review of current theory and empirical evidence connecting marital and family interaction patterns with aberrant behavior. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 574 | Family Theory for Marriage and Family Therapy | Examines the theoretical orientations within the family therapy field, including the evolution, premises, and assumptions of each. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 575 | Applied Issues in Couples - Therapy | Examines issues unique to therapeutic work with couples, including lifespan transition, multicultural issues, divorce, parenting, and remarriage. Seminar. Enroll requirements: Pre-requisites: Admission into MAS-MFT program. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 576 | Applied Issues in Human Development for MFT: Psychopathology | Recognition and diagnosis of maladaptive behavior according to DSM criteria across human development. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 577 | Applied Issues in Children and Adolescents in Marriage and Family Therapy | Examines developmental factors that lead to disorders in children and adolescents, with an emphasis on a systemic framework. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |

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| FAS | 578 | Applied Issues in Sexuality for Marriage and Family Therapy | Examines the major methods used to assess and treat sexual issues and the treatment of sexual disorders. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 579 | Applied Research in Marriage and Family Therapy | Critical examination of research concepts, quantitative and qualitative research designs, and applicability in clinical settings. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 581 | Professional Issues and Ethics | Examines legal and ethical concerns of marriage and family therapists, emphasizing licensing standards and the Code of Ethics. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only FAS 586 or SOC 586 |
| FAS | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |
| FAS | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 587 or SOC 587. Credit is allowed for only FAS 588 or SOC 588 |
| FAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 598 | Special Topics | Topical courses not offered in regular course rotation-e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |

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| FAS | | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| FAS | | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| FAS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| FAS | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| FAS | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 123 | ASU Financial Literacy | A practical approach to financial challenges faced by ASU students. Emphasizes financial choices likely to be encountered while at ASU, as well as issues to be encountered immediately upon graduation. Topics include credit cards, student loans, credit scores, saving, investing, insurance, transportation, housing, taxes, goal setting and budgeting. | N | LEC | N | YGB | W.P. Carey School of Business | Department of Finance | 1 | | Credit is allowed for only FIN 123 or 191(ASU Financial Literacy) |
| FIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-3 | | |
| FIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| FIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| FIN | 300 | Fundamentals of Finance | Theory and problems in financial management of business enterprises. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prereq(s) with C or better: ACC 241, 240, 242 or 271; ECN 212 and 221 (or ECN 231 or IEE 380 or STP 280); MAT 211, 266 or 271; W. P. Carey or Engineering Mgmt major (or Non-Bus with min 56 hours and min 2.50 GPA). Credit allowed for FIN 300, 302 or 303 |
| FIN | 302 | Managerial Finance | Theories and techniques used for business decisions in working capital management, capital budgeting, financial control, and long-term financing. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W. P. Carey Finance major; ACC 241, 242 or 271 with C or better; ECN 221 or 231 with C or better; ECN 212 or 214 with C or better; MAT 211 with C or better; Credit is allowed for only FIN 302 or 303 |
| FIN | 303 | Honors Finance | Covers basic principles of finance, practical tools for financial decision making, and evaluation methods employed by the firm. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; ACC 241 or 271, ECN 211 or 213, ECN 212 or 214, ECN 221 or 231, and MAT 211 or 271 with C or better |
| FIN | 331 | Financial Markets and Institutions | Analyzes financial markets and intermediaries. Theory of financial intermediation, interest rate theory, money and capital market instruments, and government regulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS student or Business Minor student; ACC 241 or 242 or 271, ECN 212 or 214, and ECN 221 or 231 with C or better |
| FIN | 361 | Advanced Managerial Finance | Builds on FIN 302. Advanced material on capital budgeting, cost of capital, CAPM, asset valuation, capital structure, and financial policy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 302 with C or better |
| FIN | 380 | Personal Financial Management | Dynamic analysis of personal financial planning, including time value of money, stock and bond investment, and retirement and estate planning. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree student with minimum 2.00 GPA OR Graduate student; Not for Finance major credit |
| FIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS non-Finance major; FIN 300 (or 302 or 303) with C or better |
| FIN | 421 | Security Analysis and Portfolio Management | Security analysis theory and practice. Selection and management of financial asset portfolios. Securities markets and portfolio risk-return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; ACC 315, 303 or 340 with C or better; FIN 331 and (FIN 303 or 361) with C or better |
| FIN | 427 | Derivative Financial Securities | Study of stock options, index options, convertible securities, financial futures, warrants, subscription rights, and arbitrage pricing theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 421 with C or better |
| FIN | 431 | Management of Financial Institutions | Asset/liability and capital management in financial institutions. Influence of market factors and regulatory agencies. Emphasizes commercial banks. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; ACC 315, 303 or 340 with C or better; FIN 331 and 361 with C or better; Honors student in Finance; FIN 303 and FIN 331 with C or better |
| FIN | 456 | International Financial Management | Exchange rate determination, financial markets, managing multinational corporations, capital budgeting, and hedging currency risk exposure from an international perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | G | Pre-requisites: W.P. Carey Finance BS student; ACC 315, 303 or 340 with C or better; FIN 331 and 361 with C or better; Honors student in Finance; FIN 303 and FIN 331 with C or better |

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| FIN | 461 | Financial Cases and Modeling | Case-oriented capstone course in managerial finance. Contemporary issues of liquidity management, capital budgeting, capital structure, and financial strategy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | L | Prerequisite(s) with C or better: ACC 340; FIN 303 (or FIN 361), 331; minimum 87 hours; BS Finance major. Pre- or corequisite(s): FIN 421 with C or better if completed |
| FIN | 471 | Investment Portfolio Management | Under faculty supervision, students manage over \$500,000 of the ASU Foundation's assets over the course of the year. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Prerequisite: FIN 303 or 361 with C or better |
| FIN | 472 | Investment Banking Industry Scholars | Provides conceptual basis for performing analysis, providing advice and making decisions in elite financial services firms. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Prerequisite(s): application and selection process. Credit is allowed for only FIN 472 or FIN 494 (Investment Banking Industry Scholars) |
| FIN | 481 | Honors Seminar in Finance | Honors course covering topics that include theory and applications concerning managerial finance, investments, and financial institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisites: W.P. Carey Finance BS student with Honors status; ACC 315, 303 or 340 with C or better; FIN 331 and (FIN 361 or 303) with C or better |
| FIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisites: W.P. Carey BS student; FIN 300, FIN 302 or 303 with C or better |
| FIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisites: W.P. Carey Finance BS student; ACC 315 or ACC 303 or ACC 340, FIN 331, and FIN 303 or FIN 361 all with C or better |
| FIN | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-7 | | Prerequisites: W.P. Carey Finance students with professional status; FIN 331 and 361 with C or better; ACC 315 or 340 with C or better |
| FIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-3 | | Pre-requisites: W.P. Carey Finance students with professional status |
| FIN | 502 | Managerial Finance | Develops analytical techniques and financial theories used to make optimal decisions in a corporate setting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2-4 | | Pre-requisites: ACC 502 with C or better; ECN 501 with C or better |
| FIN | 520 | Valuation Techniques | Improves the understanding of valuation concepts and how to apply them. Shows how to value assets using free cash flow and economic value-added methods. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 525 | Investment Strategies | Presents the fundamental principles of risk and return, portfolio diversification, asset allocation, efficient markets, active portfolio management, portfolio evaluation. Reviews selected alternative investment strategies such as hedge fund investments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 530 | Derivatives | Intermediate- to advanced-level course in derivative assets such as options, forward and futures contracts, swaps and financial engineering. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 540 | Advanced Financial Management | Offers a comprehensive exploration of the revolutionary developments occurring in the world's financial markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 545 | Advanced Corporate Finance | Studies major decision-making areas and selected topics in corporate finance. Attempts to develop decision-making ability in these areas using both lectures and cases. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 545 or 591 (Advanced Corporate Finance) |
| FIN | 550 | Fixed Income | Intermediate- to advanced-level course in fixed income instruments and associated relative valuation of the securities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 555 | Entrepreneurial Finance | Provides an overview of the economics and institutions involved in entrepreneurial finance. Focuses on the financing of new ventures. Consists primarily of case analysis, supplemented with in-class exercises and lecture material. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 560 | International Finance | Examines the financial issues of an international investment decision. Main topics include foreign exchange market, investment alternatives in the international capital markets, and the management of foreign exchange risk. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 565 | Risk Management in Banks and Financial Institutions | Provides a risk management view of financial institutions (also known as financial intermediaries). Traditionally, banking courses have focused on an overview of the financial services industry, sector by sector, concentrating on balance sheet presentations and overlooking management decision making and risk management. In contrast, this course emphasizes a risk management approach. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 570 | Investment Fundamentals and Portfolio Management | Surveys the theory and practice of investment management in highly competitive capital markets. Presents the fundamental principles of risk and return, portfolio diversification, asset allocation, efficient markets, portfolio management and the role of derivatives in enhancing portfolio performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 575 | Finance Capstone | Provides a culminating experience as a step in completing the degree. Applies finance principles related to the investment, risk management and financing policies of the firm to develop decision-making ability in these areas. Emphasizes analysis of finance problems through selected readings and case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 575 or 591 (Finance Capstone) |
| FIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: FIN 502 with C or better |
| FIN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 781 | Theory of Finance | Fundamental tools of financial economics: asset pricing, arbitrage, option pricing, capital structure, dividend policy, asymmetric information, and transaction-cost economics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 782 | Theory of Finance II | Fundamentals of corporate finance, contract theory, agency problems, and game theory applications in Finance. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 783 | Empirical Asset Pricing | Asset pricing models in finance; efficient market hypothesis, empirical factor models, option pricing basics. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 785 | Financial Economics of Capital Markets | Asset pricing theory, equilibrium asset pricing models, and the equity premium puzzle; incomplete and imperfect markets. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 786 | Corporate Finance | Issues in corporate finance covering topics that impinge on corporate finance, financial contracting, intermediation, empirical corporate finance, microstructure. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 201 | Film: The Creative Process I | History, elements, and techniques of theatrical film: cinematography, directing, acting, scriptwriting, producing, and criticism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | |
| FMP | 202 | Film and Media Production Crew | Provides opportunity to serve in various capacities on student film sets in order to obtain practical production experience. Practicum. Prerequisite: instructor approval. | N | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |

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| FMP | 220 | Film and Media Post-Production I | Required 45-hour lab designed to teach students how to use the Avid Media Composer editing program and supporting software with an emphasis on editing techniques and workflow. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 100-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified User. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Film and Media Production student |
| FMP | 222 | Education in Film | Critically examines how teachers, students, administrators and educational issues are dramatized and represented in popular media. Explores professional teacher preparation, socio-cultural contexts of education systems and learning, and the use of cinema as social critique. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 102) with C or better. Credit is allowed for only FMP 222 or FMP 294 (Education in Film) |
| FMP | 250 | Sex and Violence in Film and TV: Ethics Survey | Sex and violence portrayals in media; examines societal evolution, technological development, market imperatives, production codes, and industry realities and practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 255 | Media Authorship | Surveys the manipulation, editing, compression, encoding and search engine optimization of digital sound and video media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | Credit is allowed for only FMP 255 or 294 (Media Authorship) |
| FMP | 261 | Introduction to Screenwriting | Basic skills of screenwriting including exercises in conflict and resolution, plot points, and theories of three-act structure and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better |
| FMP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 300 | Focus on Film | Specialized study of prominent film artists, techniques, and genres. Emphasizes the creative process. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: ENG102, 105 or 108 with C or better |
| FMP | 318 | Directing for Film | In-depth analysis of directing theory, textual analysis, visualization, shot composition and spatial connection, staging, rehearsal techniques, and camera movement. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film and Media Production student; FMP 320 with C or better |
| FMP | 320 | Film and Media Post-Production II | In-depth analysis of editing theory, storytelling, nonlinear editing techniques and equipment, basics of visual and audio effects and color grading using the Avid Media Composer editing program and supporting software with an emphasis on storytelling and aesthetics. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 200-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified Professional. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s) with C or better: FMP 220; FMP 300 (Film Production Part 1 or Film Production: Film & Media Part 1 or THE 400); BA Film (Film & Media Production) major |
| FMP | 330 | Professional and Technical Writing for Film/TV Industry | Professional (noncreative) writing skills that prepare students for a career in the entertainment industry. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 220 with C or better; Minimum 56 hours. Credit is allowed for only FMP 330 or 494 (Prof & Tech Writing for Film, Media & TV Industry) |
| FMP | 345 | Cinematography I | Cinematographer's role, photographic and visual theory, framing, shot composition, cameras and equipment, crew management, basic lighting for film and video. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: FMP 220 and FMP 300 OR FMP 394 (Non-Linear Editing for Film and Media) |
| FMP | 380 | Film Production Crew | Provides a practical, on-set experience for all Film (Filmmaking Practices) majors. | N | PRA | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: BA Film (Filmmaking Practices) major; 2.50 ASU cumulative GPA; FMP 300 with C or better; Credit is allowed for only FMP 380 or 494 (Film Production Crew) |
| FMP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 398 | Capstone Development | Provides the opportunity for all Film and Media Production majors to conceive, develop and complete the intellectual property that will form the basis of their required final capstone projects for FMP in the School of Theatre and Film at Arizona State University. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisites: |
| FMP | 417 | Business Ethics in Entertainment | Business and ethical practices of the entertainment industry; analysis of ethical decision-making techniques. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 420 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| FMP | 480 | Film Production Capstone I | Preparation for final project: screenplay, budget, shooting schedule, production lists and reports for preproduction of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 318 with C or better; THE 220 with C or better |
| FMP | 481 | Film Production Capstone II | Final project shooting and postproduction: shooting, editing picture, sound, effects and music; audience screening of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 480 with C or better |
| FMP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| FMP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisites: Film and Media Production student or Filmmaking Practices student or Film and Media Production minor |
| FMP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |

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| FMP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: Film & Media Production or Filmmaking Practices student |
| FMP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisite: Fine Arts Graduate student |
| FMS | 100 | Introduction to Film | Introduces the narrative structure, visual style, and cultural elements of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| FMS | 110 | Introduction to New Media | Explores the cultural effects of new media technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | |
| FMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 200 | Film History | Introduces the technological, aesthetic, social, and economic aspects of international film history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & H | |
| FMS | 202 | Religion and Popular Culture | Explores various intersections between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | |
| FMS | 209 | Screenwriting Fundamentals | Studies the creativity and the technique of screenwriting for the conventional narrative film and for TV; student writing exercises culminate in a script for micro cinema. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Credit is allowed for only FMS 270or TCL 270 |
| FMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 300 | Television and Cultural Studies | Applies cultural studies theory and method to the study of American television history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 302 | U.S. Media Now | Examines the business of contemporary U.S. film, television, and new media and its relationship to artistic vision and production through research and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 309 | Intermediate Screenwriting | Utilizing the elements of storytelling, students develop and write a treatment and the first act of a screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies conc; ENG 102(or 105 or 108) with C or better; FMS 100 with C or better; FMP 261 (or FMS 209 or THP 261) with C or better |
| FMS | 310 | Asian Pacific American Arts and Cultures | In-depth exploration of Asian Pacific American cultural expression in art, literature, film, theatre, dance, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or 30 minimum hours. Credit is allowed for only APA 310 or FMS 310 |
| FMS | 312 | Film, Media, and Politics Today | Examines how entertainment technologies inform political innovation and campaigning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 340 | Contemporary American Film and Popular Culture | Analyzes American films, television programs, and music as popular cultural documents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| FMS | 350 | Virtual Reality in Film and Media | Analyzes virtual reality in films, media, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 351 | Emerging Digital Media | Analyzes modern cultural and digital technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| FMS | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | |
| FMS | 354 | Critical Studies in Animation | Provides critical and practical tools for analyzing mainstream, experimental, and hybrid animation aesthetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: FMS 100 |
| FMS | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| FMS | 374 | American Visions: Innovators in Popular Media | In-depth examination of the career of an innovator in media, whether a producer, director, or scriptwriter, through his/her status as a unique storyteller of the American experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better; Minimum 45 hours |
| FMS | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or REL 376 |
| FMS | 377 | Baseball, Film, and American Dreams | Critical viewing and analysis of both narrative and documentary baseball film. Genre typically explores American values and national culture, and changes in our concepts of gender roles, race, aging, social class. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |

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| FMS | 409 | Advanced Screenwriting | Utilizing the elements of storytelling, students outline, develop, and write a feature-length screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better; FMS 309 with C or better |
| FMS | 411 | Screenwriting Adaptation Studies | Explores the many issues related to narrative adaptation across movies and other media such as television, various Internet phenomena and gaming. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s) with C or better: ENG 102, 105 or 108; FMS 200; Film and Media Studies major, minor or BIS Film and Media Studies concentration; Credit is allowed for only FMS 411 or 494 (Screenwriting Adaptation Studies) |
| FMS | 420 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| FMS | 426 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| FMS | 427 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Minimum 55 hours; One 200-level course in literature, art history, history, or film and media studies with a grade of B- or better; Credit is allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| FMS | 430 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| FMS | 440 | Los Angeles: Movies and Culture | Explores film treatment of the historical culture of Los Angeles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 441 | Global Cinema | Examines how film represents three important dimensions of globalization: its relationship to national culture, terrorism, and immigration. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 442 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| FMS | 450 | Technology, Culture, and Media | Studies the socio-political relationships among technology, culture, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 460 | Masculinity and Film | Examines the representation of masculinity and the male body in film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 461 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |
| FMS | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only FMS 464, ENG 458 or TCL 464 |
| FMS | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 465 |
| FMS | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | Credit is allowed for only FMS or TCL 466 |
| FMS | 468 | Crime and Violence in American Film | Addresses three primary aspects of crime and violence in film: representation, societal attitudes, effects on audience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |
| FMS | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | |
| FMS | 480 | Globalization, Technology, and Culture | Studies the socio-political relationship between media and the evolution of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 481 | Entertainment Technologies | Applies academic and industry knowledge to simulate and to solve "real world" entertainment industry problems and needs. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102 (or ENG 105 or 108) with C or better; FMS 100 with C or better |
| FMS | 482 | Entertainment Industries | Uses historical methodologies to critique emerging trends in the business of new media storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102 (or ENG 105 or 108) with C or better; FMS 100 with C or better |
| FMS | 483 | Techno-Entertainment Convergences | Uses historical and scientific methods to forecast future technological developments and use in the entertainment industry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102 (or ENG 105 or 108) with C or better; FMS 100 with C or better |
| FMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | |
| FMS | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| FMS | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 490 | Capstone Seminar | Capstone seminar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major; minimum 56 hours; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |

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| FMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | | |
| FMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 502 | Hollywood Film Historiography (Online) | This course is offered online only. Explores historiographic and critical scholarship on Hollywood as an industrial, cultural, and aesthetic enterprise. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 503 | Media Industries | Examines the business of contemporary U.S. media practices including film, television, Web-based media, music, video games, mobile phones, and other interactive media. Explores the changing economic structures of these media industries and their relationship to artistic vision and production. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Master of Liberal Studies student or MAS in American Media and Popular Culture student. Credit is allowed for only MLS or FMS 504 |
| FMS | 507 | Crime and Violence in American Film (Online) | This course is available online only. Focuses on historiographic and critical scholarship on three aspects of crime and violence in American film: (1) regulation and censorship; (2) representation and society; and (3) theories about the effects on audiences of viewing crime and violence in films. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 509 | Race, Sex, and Identity Online (Online) | This course is available online only. Investigates scholarly methods and studies focused on the intersection of race, gender, and sexuality online. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 511 | Fundamentals of Cinema & Television Narrative Online | Studies the creativity and the technique of screenwriting for the conventional narrative film and for television. Student writing exercises culminate in a script for micro-cinema. Seminar. Pre-requisite: online student in MAS American Media and Popular Culture | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 512 | Intermediate Cinema and Television Narrative (online) | Focuses on the feature-length screenplay; students complete the first act and treatment of an original feature. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 520 | Cultural History of US Television: Theory & Method | Engages both the theory and methods of cultural studies as implemented in television studies and U.S. television history (from the 1940s to the present). | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| FMS | 521 | Semiotics of Popular Culture | Uses semiotics and cultural studies to uncover representations of alienation. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 522 | Los Angeles: Movies and Culture | Focuses on historiographic and critical scholarship of industry, genre and representation in post-war, self-reflexive Hollywood cinema. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 523 | Film Authorship | Explores the notion of authorship in film, television, and digital media by engaging with a number of critical methodologies such as auteurism, structuralism, post-structuralism, feminism. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 527 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| FMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FOR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |

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| FOR | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| FOR | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375; Credit is allowed for only FOR or LSC 376 |
| FOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 420 | Modern Practices in Forensic Science | In-depth treatment of the practices and procedures used by forensic scientists in the modern crime laboratory. Students apply lecture topics to forensic-themed laboratory activities. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181, 182, 305 (or FOR 286); CHM 113, 116. Pre- or corequisite(s): BCH 371, 372; LSC 347, 348 |
| FOR | 475 | Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394: Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| FOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): minimum 45 hours |
| FOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | |
| FOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| FOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FRE | 101 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not sign up for FRE 101 if they have received a C or better in FRE101,102,201,202,205,311,312,321,322,411,412 |
| FRE | 102 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisite: FRE 101; Credit is allowed for only FRE 102, FRE 111, 201, 202, 205, 311, 312, 321, 322, 411, or 412 |
| FRE | 111 | Fundamentals of French | Primarily for students with two years of high school French who need review to enter second year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not sign up for FRE 111 if they have received a C or better in FRE 101,102,201,202,205,311,312,321,322,411,412 |
| FRE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| FRE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 201 | Intermediate French I | Grammar review, with emphasis on development of skills of speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Student may not enroll in FRE 201 if received a C or better in: FRE202,205,311,312,321,322,411,412 |
| FRE | 202 | Intermediate French II | Continuation of grammar review with emphasis on development of skills in speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not sign up for FRE 202 if they have received a C or better in FRE205,311,312,321,322,411,412 |
| FRE | 207 | French for Business | Alternative to FRE 202. Functional approach. Emphasizes communicative competence for international professions. Not open to students with credit in FRE 202. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 8 | G | |
| FRE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| FRE | 305 | Readings in French Literature | Survey of francophone literature designed to teach reading with facility and comprehension. Vocabulary building, familiarity with literary terms, their meaning and use, and introduction to textual analysis of literary genres are major elements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | FRE 202 with C or better. Students may not enroll in FRE 305 if credit earned in FRE 321 or 322 |
| FRE | 311 | Oral and Written Expression I | Practices interpersonal and interpretive writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 202 with C or better. Credit is allowed for only FRE 311 or FRE 411 |
| FRE | 312 | Oral and Written Expression II | Practices presentational writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: FRE 202 with C or better. Credit is allowed for only FRE 312 or 412 |
| FRE | 315 | French Phonetics | Practice and theory of French pronunciation. Emphasizes standard French, although an overview of regional varieties is offered. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 311 |
| FRE | 319 | Business French | Introduces the structure, vocabulary, and practices of the French business world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312 |
| FRE | 321 | French Literature | Representative masterpieces and significant movements of French literature of the Middle Ages through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: FRE 305; FRE 312 |
| FRE | 322 | French Literature | Literature of the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 305; FRE 312 |
| FRE | 325 | Introduction to French Film | Studies French artistic contribution from 1895 to present, with emphasis on recent films starting with the New Wave. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| FRE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 411 | Advanced Spoken French | Improvement of spoken French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 311; 6 hours of 300-level French |
| FRE | 412 | Advanced Written French | Improvement of composition skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312; 6 hours of 300-level French |
| FRE | 415 | French Civilization I | Political, intellectual, social, economic, and artistic development of France from its origins to the end of the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: 6 hours of upper-division French |
| FRE | 416 | French Civilization II | Political, intellectual, social, economic, and artistic development of France from the 18th century to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: 6 hours of upper-division French |
| FRE | 421 | Structure of French | Phonology, morphology, syntax, semantics, and varieties of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 311; FRE 312 |
| FRE | 422 | Applied French Linguistics | Applies linguistic theory and second-language acquisition theory to teaching of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ASB 480, ENG 213 or SLC 400 |
| FRE | 423 | French Syntax | Analyzes French syntactic structure by contemporary theoretical models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ASB 480, ENG 213, SLC 400, SLC 201, or FRE 421 |
| FRE | 432 | Gay Identities in Modern French Literature | Examines the representation of homosexuals as well as the emergence of homosexuality as a theme in modern French literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 441 | French Literature of the 17th Century | From 1600 to 1660. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 442 | French Literature of the 17th Century | From 1660 to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 445 | French Literature of the 18th Century | Contributions of the philosophers and the development of the novel and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 451 | French Poetry of the 19th Century | From Romanticism to Parnassian poetry to Symbolism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 452 | French Novel of the 19th Century | From Constant, Hugo, Balzac, Stendhal, and Sand to Flaubert and Zola, with emphasis on major literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 453 | Theater of the 19th Century | From Romantic drama to the Symbolist Theater. Representative plays of Hugo, Musset, Vigny, Dumas, Becque, Rostand, Feydeau, and Mirbeau. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 461 | Modern Narrative | Representative authors from Gide to the new Nouveau Roman. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 462 | Modern Poetry | Representative authors from Mallarmé to Bonnefoy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 471 | The Literature of Francophone Africa and the Caribbean | Selected prose, poetry, and drama of black authors from Africa and the Caribbean. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 472 | Franco-Canadian Civilization | Study of the civilization of Quebec in particular through its history, language, literature, music, and customs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: 9 hours of 300-level French courses |
| FRE | 480 | Translation Theory and Practice | Theoretical and practical approaches to the fundamentals of meaning-based translation. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 412 |
| FRE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| FRE | 485 | Literary Translation | Theory and practice of literary translation with emphasis on application through individual translation project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 480 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FRE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| FRE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FRE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| FRE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| FRE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 510 | Introduction to Textual Analysis | Introduces various oral and written techniques aimed at explicating literary texts. Required of all French graduate students focusing on literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FRE 494 (Introduction Textual Analysis) or 510 |
| FRE | 521 | History of the French Language | Principal phonological, morphological, and semantic developments of French from Latin to present, with emphasis on Old and Middle French. Some familiarity with Latin is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 531 | Medieval French Literature | Readings in the epics, early drama, Roman courtois, and other representative literary genres of the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 535 | Identity, Gender, and Society in Early Modern French Literature | Readings in French Renaissance literature with special focus on Rabelais, Montaigne, Marguerite de Navarre. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 585 | Literary Translation | Theory and practice of literary translation with emphasis on application through individual translation project. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 100 | Introduction to Engineering | Introduces the engineering design process; working in engineering teams; the profession of engineering; engineering models, written and oral technical communication skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 2 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FSE | 104 | EPICS Gold Feasibility and Planning | First of a sequence of three one-credit service-learning courses in which EPICS GOLD groups are formed from students potentially representing all engineering, computer science and construction disciplines as well as other ASU majors, including sustainability, business, liberal arts, sciences and others. Groups of 4-5 students work together to assess the feasibility and sustainability of their proposed plans for long-term projects that solve problems and benefit clients and often, the larger community. Project work centers on the engineering, technology, computing, sustainability, business and other needs of a not-for-profit community partner; interdisciplinary group interaction is an integral element for the project success. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student. Credit is allowed for only FSE 104 or 194 (EPICS Gold I) |
| FSE | 105 | College Adjustment and Survival | Explores career goals and majors. Emphasizes organization and development of study skills, including time management, stress management, and use of the library. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Pre-requisites: Freshman or Sophomore in the Ira A. Fulton School of Engineering |
| FSE | 150 | Perspectives in Grand Challenges for Engineering | Explores social dimensions of developing engineering solutions to meet local and global challenges. Introduces National Academy of Engineering (NAE) Grand Challenges for engineering and Grand Challenge Scholars Program. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | SB | Prerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for Engineering. Prerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for Engineering |
| FSE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | HU | Credit is allowed for only SOS 181, FSE 181, or CEE 181 |
| FSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 201 | Engineering Undergraduate Teaching Assistant | Theory and rationale of active learning and teaching strategies that stimulate intellectual development. Leadership, teaching, teamwork and communication skills needed to facilitate effective undergraduate learning in engineering. Implementation of these skills in a classroom setting. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Ira A. Fulton School of Engineering major; minimum sophomore standing |
| FSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 301 | Entrepreneurship for Engineers | Overview of entrepreneurship, with emphasis on principles suitable for undergraduate engineering students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; minimum junior standing |
| FSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 399 | Cooperative Work Experience | Work periods with industrial firms or government agencies alternated with full-time course work. Not open to students from other colleges. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 400 | Creating and Launching a Technology Venture | Focuses on creative and logical processes involved in developing a business idea and investigating its market feasibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; Pre- or corequisite(s): FSE 301 |
| FSE | 401 | Intellectual Property for Technology Ventures | Provides basic understanding of legal issues likely to be encountered in a technology venture; practical approaches and solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; Pre- or corequisite(s): FSE 301 |
| FSE | 402 | Operating a Technology Venture | Managing and leading technology ventures. Principles of organizing, planning, controlling, and leading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; Pre- or corequisite(s): FSE 301 |
| FSE | 403 | Entrepreneurship Practicum | Places students pursuing a Certificate in Technology Entrepreneurship with a practicing entrepreneur to learn about venture development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; Pre- or corequisite(s): FSE 301 |
| FSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| FSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 501 | Technology Entrepreneurship | Fundamental principles and concepts of technology entrepreneurship. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| FSE | 502 | Strategic Enterprise Innovation | Strategies, techniques, and practices of process, product, and management innovation across the enterprise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: School of Engineering Graduate student |
| FSE | 503 | Collaborative Innovation Management | Techniques and practices of collaboration innovation, including an indepth look at managing outsourcing relationships and "wikinomics." | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: School of Engineering Graduate student |
| FSE | 504 | Corporate Venturing and Intrapreneurship | Explores how companies can create intrapreneurial cultures that lead to greater levels of corporate venturing and long-term competitiveness. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: School of Engineering Graduate student |
| FSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 590 | Reading and Conf | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 594 | Conf and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering graduate student |
| FSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GBL | 10 | Business English Communications I | This course is designed to introduce students to the challenges of the degree bearing MGMMAGAM programs at Thunderbird. Each class focuses on a different language communication fundamental (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GBL | 11 | Business English Communications II | This course is a continuation of GBL 10 in that it further develops the students to meeting the challenges of the degree bearing MGMMAGAM programs at Thunderbird. Students may enter into GBL 11 directly with a TOEFL score of 95 Internet-Based test or better. Each class continues to improve upon one or more of the different language communication fundamentals (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Entry Ed |
| GCU | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | Credit is allowed for only HST or GCU 114 |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SB & G | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GCU | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |
| GCU | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GCU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 200 | Orientation to Geography | Basic introduction to the Department of Geography faculty, undergraduate graduation requirements, and possible jobs and skills in geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | |
| GCU | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| GCU | 241 | The Global Economy in Transition | Production, distribution, and consumption of various types of commodities of the world and relationships to the activities of humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 15 hours |
| GCU | 253 | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 322 | Geography of U.S. and Canada | Spatial distribution of relevant physical, economic, and cultural phenomena in the United States and Canada. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 323 | Geography of Latin America | Spatial distribution of relevant physical, economic, and cultural phenomena in South, Middle, and Caribbean America. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as numerous analytical essays and an in-depth research paper, in addition to regular tests and quizzes, are required. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 45 hours |
| GCU | 325 | Geography of Europe | Broad and systematic overview of Europe, emphasizing physical, economic, and cultural phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 326 | Geography of Asia | Spatial distribution of relevant physical, economic, and cultural phenomena in Asia, excluding the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 328 | Geography of Middle East and North Africa | Spatial distribution of relevant physical, economic, and cultural phenomena in the Middle East and North Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 332 | Geography of Australia and Oceania | Spatial distribution of relevant physical, economic, and cultural phenomena in Australia, New Zealand, and Pacific Islands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 344 | Geography of Hispanic Americans | Examines the homelands, migrations, settlements, landscapes, roles, and selected cultural traditions of Hispanic Americans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 350 | The Geography of World Crises | Contemporary world crises viewed from a perspective of geographic concepts and techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 351 | Population Geography | Demographic patterns; spatial, temporal, and structural investigation of the relationship of demographic variables to cultural, economic, and environmental factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisites: MAT 117, 119, 142, 170 or 210 with C or better; Credit is allowed for only GCU 351 or SBS 351 |
| GCU | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 357 | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |

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| GCU | 359 | Cities of the World I | Historical evolution of urban patterns and structures in the Middle East, India, Southeast Asia, China, Japan, and Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | |
| GCU | 360 | Cities of the World II | Historical evolution of urban patterns and structures in Latin America, North America, Sub-Saharan Africa, and Australasia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 361 | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 364 | Energy in the Global Arena | Production, transportation, and consumption of energy, emphasizing the electric power industry and its environmental problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 373 | Introduction to Geographic Information Science | Introduces theoretical and computer-based aspects of Geographic Information Systems, involving data analysis and map generation. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SG | Pre-requisite: PSY 230 or SBS 304 |
| GCU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 414 | Teaching Geography Standards | Introduces Arizona Geography Standards for K-12 educators, emphasizing exciting curricula and illustrated with best practices by master teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 421 | Geography of Arizona and Southwestern United States | Geography of the Southwest with an emphasis on Arizona. Divided into physical geography, history, people, and economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 424 | Geography of Mexico and Middle America | Central America and Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 425 | Geography of the Mexican American Borderland | Geography of a binational and bicultural region. Examines settlement, boundary issues, ethnic subregions, population change, industrial development, and urban growth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or SB) & G | |
| GCU | 426 | Geography of Russia and Surroundings | Examines the geography of Russia and other post-Soviet states. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 432 | Geography of China | Examines the physical, economic, cultural, social, demographic, agricultural, political, historical, and environmental aspects of the geography of China. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 433 | Geography of Southeast Asia | Examines the biophysical and social features of Southeast Asian nations and peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 441 | Economic Geography | Spatial distribution of primary, secondary, and tertiary economic and production activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 442 | Geographical Analysis of Transportation | Networks, modes, economics, and flows at the urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 474 | Public Land Policy | Geographic aspects of federal public lands, policy, management, and issues. Emphasizes western wilderness and resource development problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GCU | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| GCU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GCU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GCU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 496 | Geographic Research Methods | Scientific techniques used in geographic research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisites: GPH 111, GCU 102, GCU 121 and GIS 205 with C or better |
| GCU | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |

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| GCU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GCU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GCU | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social data collection methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GCU or SOS 514 |
| GCU | 515 | Human Migration | Economic, political, social, and geographic factors underlying population movements. Migration selectivity, streams and counter-streams, labor migration, and migration decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 516 | Principles of Urbanism | Organizing core course for PhD concentration in Urbanism. Gives overview of various perspectives on urbanism to present basic tenets, disciplinary threads, and body of scholarship associated with urbanism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GCU 516, PUP 560 or SOS 560 |
| GCU | 529 | Contemporary Geographic Thought | Comparative evaluation of current philosophy concerning the nature and trends of geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 542 | Geographical Analysis of Transportation | Examines the geographical aspects of transportation systems. Looks at the geography of networks; transport costs and rates; different modes of transport, trade, economic development, and technology. Studies the movement of freight and passengers at the individual, urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 585 | Geographic Research Design and Proposal Writing | Prepares students to undertake creative geographic research culminating in the generation of new knowledge. Serves as a foundation for the student in achieving the objective of a productive and successful degree. To accomplish this, instruction stresses a research framework, ethical practice, and the generation of an original research proposal. Specific learning objectives are: to produce an area of specialization statement, literature review, problem statement, description of methods and final proposal; to develop the skills needed to conceive and plan a research project; to communicate ideas effectively in written and oral form; to develop and articulate informed opinions about research designs; to learn about academic publishing format and process; and to understand and engage in ethical research practices. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student |
| GCU | 586 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GCU | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 596 | History of Geographic Thought | Historical development of geographic thought from pre-Greek days to the early 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 671 | Introduction to Geographic Teaching | Intensive course in geographic education, scientific method in research on geographic education, research trends, resources for teaching, best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 672 | Physical Geography for Teachers | Transfer of matter and energy exhibited in the Earth's climate, hydrology, soils, biogeography, and landforms; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 673 | Human Geography for Teachers | Analyzes cultural, economic, urban, historical, transportation, population, political, and development geography; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 674 | Geographic Techniques for Teachers | Introduces geographic techniques, including GPS, GIS, remote sensing, cartography, qualitative, and field methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 675 | World Geography for Teachers | Systematic overview of geographic knowledge about different world regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 676 | North American Geography for Teachers | Systematic overview of geographic knowledge about different North American regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 677 | Geography Across the Curriculum | Intensive course on intergrating reading, writing, and mathematics standards with geography content; selected case studies; best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| GCU | | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SB & G | |
| GCU | | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SB & G | |
| GCU | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| GCU | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 101 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Credit is allowed for only GER 101 or 111 |
| GER | 102 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GER | 111 | Fundamentals of German | Primarily for students with two years of high school German who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |
| GER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| GER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 201 | Intermediate German | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 102 or 111 with C or better |
| GER | 202 | Intermediate German | See GER 201 | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 201 with C or better |
| GER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 310 | Advanced German Grammar | Intensive, contextualized advanced German grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 202 with C or better |
| GER | 311 | German Conversation | Expansion of idiom through oral practice dealing with contemporary articles, essays and stories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: GER 202 with C or better |
| GER | 312 | Readings in German Culture | Provides strategies for building reading proficiency in German through longer cultural texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 313 | German Composition | Intensive practice in writing, emphasizing style and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 315 | Germanic Mythology | Religious and spiritual beliefs and practices of the ancient Germanic peoples as reflected in their culture, including the pantheon of their gods, as well as the reception of these beliefs through and including contemporary times. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ENG 102, 105, or ENG 108 with C or better; Credit is allowed for only GER 315 or 394 (Germanic Mythology) |
| GER | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 412 | Advanced German | Improvement of writing and speaking ability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 313 with C or better |
| GER | 415 | German Civilization | Aspects of political, social, and cultural life of the German-speaking world from the beginning through 1600. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 416 | German Civilization | From 1600 through 1945. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 421 | German Literature | From the beginning to Classicism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: 6 hours of 300-level German courses |
| GER | 422 | German Literature | From Romanticism to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: 6 hours of 300-level German courses |
| GER | 431 | German Humor | Popular and literary texts (collections of jokes, pranks and comedies) in the print and visual media provide a basis of comparison for students to reflect critically on the function of humor in German culture from the sixteenth century until the present. Exposes the different types and functions of German humor and understands both the historical and the contemporary theoretical debate on the study of (German) humor. Taught almost exclusively in German, with reading and writing assignments done in the target language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Two 300-level GER courses with C or better; Credit is allowed for only GER 431 or 494 (German Humor and Comedy) |
| GER | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| GER | 453 | German Literary Masterpieces on Film | Film and literature in their correlation to each other and to cultural, political, and social trends in German-speaking countries. Special arrangements for graduate students and those without a knowledge of German. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | |
| GER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| GER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| GER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| GER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| GER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 521 | History of German Language | Linguistic development of German from the earliest records to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 201 | Spatial Thinking | Introduces spatial thinking, a cross-disciplinary foundation for geographic information science (the science of dealing with spatial/geographical data; their manipulation, interpretation and use in problem solving); geospatial technologies (the specific technologies underpinning geographic information science); and spatial analysis (the science of solving spatial problems). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GIS | 205 | Geographic Information Technologies | Introduces modern geographic information technologies, including cartography, GIS, remote sensing, global positioning systems, and statistical analyses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | |
| GIS | 211 | Geographic Information Science I | History and basic aspects of GIS including map and data file structure, conversions, and synthesis with a computerized environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | |
| GIS | 220 | Mathematical Principles in GIS | Covers the basic math principles needed to excel in GIS and spatial analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: MAT 265 (or MAT 270) with C or better |
| GIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 311 | Geographic Information Science II | GIS as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval, and graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | Prerequisite(s): GIS 211 with C or better |
| GIS | 321 | Programming Principles in GIS | Basic principles of programming for GIS in python covering data processing, analysis, and application development. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: CSE 110 |

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| GIS | 322 | Spatial Data Structures and Algorithms | Fundamental data structures and algorithms for the integration, management, processing and analysis of geographically referenced data. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 321 |
| GIS | 341 | Introduction to Cartography and Georepresentation | Study and creation of maps. Fundamental mapping principles (projection, scale, generalization, symbolization) and computer-based cartographic production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): minimum 45 hours |
| GIS | 351 | Air Photo Interpretation | Subset, remote sensing, includes photography, films, aerial geometry, image components, stereoscopy, photogrammetry, ground truthing; interpret physical, cultural, economic, intelligence information. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): minimum 45 hours |
| GIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 412 | Spatial Decision Support Systems | Theoretical and technical requirements for implementing spatial decision support tools. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): CSE 110 with C or better; GIS 311 with C or better |
| GIS | 431 | Spatial Databases | Covers data modeling concepts, the relational data model for the storage and retrieval of spatial and nonspatial information. The data retrieval emphasizes the industry-standard query language SQL and Spatial Query Languages. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 311; GIS 322 |
| GIS | 441 | Geographics: Interactive and Animated Cartography and Geovisualization | Advanced cartography, stressing influence and application of the computer on geographic representation. Emphasizes creation of maps for the Internet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): minimum 45 hours |
| GIS | 461 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| GIS | 462 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): GIS 211 or 461. Credit is allowed for only GIS 462 or GIS 562 or PUP 482 or PUP 582 or PUP 598 (Location Modeling) |
| GIS | 470 | Statistics for Geographers | Statistical techniques applied to the analysis of spatial distributions and relationships. Introduces models and theory in geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s) with C or better: MAT 117 (or MAT 119, 142, 170, 210, 211, 251, 265 or 270) |
| GIS | 471 | Geographic Information Analysis | Basics of spatial data analysis. Topics include point pattern analysis, spatial autocorrelation, spatial regression, and kriging. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 470 |
| GIS | 472 | Spatial Regression Analysis | Students gain insight into the scope of spatial regression methods, apply them in an empirical setting, and properly interpret the results of spatial regression analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 471; Credit is allowed for only GIS 472 or GPH 598 (Spatial Regression) |
| GIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GIS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 501 | Fundamentals of Geographic Information Science | Covers the basic topics of Geographic Information Science research including scale, coordinate systems, data, analysis, remote sensing, geocoding, and mapping. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GIS | 505 | GIS for Planners | Provides concepts of Geographic Information Systems technology and how the technology is used in planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 512 | Spatial Decision Support | Designs and implements a spatial decision support system and analyzes and understands the theoretical underpinnings that form these systems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 412 or GIS 512 |
| GIS | 515 | GIS Workshop for Planners | GIS as a tool to address large, multifaceted planning problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIS 515 or PUP 576 |
| GIS | 521 | Geographic Information Science III | In-depth look at programming within GIS. Focuses on programming and methodology, utilizing specific software, and basic scientific computing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 531 | Spatial Databases | Advanced data modeling concepts, the relational data model for the storage and retrieval of spatial and non-spatial information. Data retrieval emphasizes the industry-standard query language SQL and spatial query languages. Covers research topics for graduate students. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 431 or GIS 531 |
| GIS | 561 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GCU 494 (Optimization Fundamentals) or GCU 598 (Optimization Fundamentals) or GIS 461 or GIS 561 or PUP 481 or PUP 581 |
| GIS | 562 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GIS 561; Credit is allowed for only GIS 462, 562, PUP 482, 582, or 598 (Location Modeling) |
| GIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | |
| GIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------------------------------------|-------|-----------------|----------------------------------------------------------------|
| GIS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 601 | Introduction to Geographic Information Systems | Introduces GIS theory and practice for professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 602 | Intermediate GIS | Introduces visualization, spatial analysis and open source tools. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 603 | Spatial Statistics and Modeling | Introduces spatial statistics and modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 604 | Implementation in the Corporate and Public Sectors | GIS use in the corporate and public sectors including proposal development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 605 | GIS Project Planning and Implementation | Moving from project proposal to implementation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 606 | GIS Project Presentation | Development of technical reports and presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 610 | Programming the GIS Environment | Programming fundamentals for desktop GIS and custom applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 630 | GIS Technologies | Uses technology for GIS data collection and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: graduate MAS-GIS major |
| GIS | 640 | GIS for Business | Uses of GIS in business practice including site suitability, demographic data and business analyst. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 650 | GIS for the Internet | Programming GIS for the Internet and mobile applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 135 | Graphic Communications | Technologies and processes involved in the design, image generation, transmission, and industrial production of graphic information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |

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|---------|----------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GIT | 210 | Creative Thinking and Design Visualization | Fundamental methods, concepts, and techniques of creative thinking, design visualization, and problem solving, including communication and societal influences. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 211 | Introduction to Video Game Art | 2D and 3D art assets for video games. Areas covered: classic pixel art, seamless texturing and tiling, sprite animation, 3D virtual studio, box modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Credit is allowed for only GIT 211 or 294 (Intro to 2D-3D Video Game Art) |
| GIT | 215 | Introduction to Web Authoring | Graphic user interface planning and evaluation using industry-standard languages; graphics, color layout and file format considerations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 230 | Digital Illustration in Publishing | Raster and vector illustration in publishing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 237 | Web Content Design | User-centered design principles for visual content on the World Wide Web with emphasis on usability, page architecture, search engine optimization, coding, scripting and interactivity. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 215; GIT 230 or Prerequisite(s): BAS in Graphic Information Technology or BAS in Internet and Web Development student |
| GIT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 295 | Introduction to Technical Imaging | Explores imaging technologies utilized in industry. Covers basic imaging concepts, chip technologies, optics, motion analysis, high-speed video, thermal imaging, and science relating to light and latent imaging. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Undergraduate student. Credit is allowed for only GIT 295 or 294 (Introduction to Technical Imaging) |
| GIT | 301 | Website Development for Nonmajors | Analyzes Web programming applications for non-GIT majors; emphasizes problem solving in structuring Web documents. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Minimum 45 hours |
| GIT | 303 | Digital Publishing | Web and print publication design and production using industry-standard composition software, proofing, and output devices. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development. |
| GIT | 312 | 3-D Computer Graphics Modeling and Representation | 3-D modeling applications: modeling for video games, mapping techniques, texturing, box modeling, geometric representation, strategies and assemblies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | CS | Pre-requisites: GIT 211 or GIT 294 (Intro to 2D-3D Video Game Art) |
| GIT | 314 | Multimedia Design, Planning and Storyboards | The creative process of generating ideas, conceptualizing projects, planning, designing, story boarding, and presenting interactive multimedia products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 210, GIT 215 and GIT 230 OR CST 200 and IFT 301 OR BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 333 | Printing Technology | Theory and application of sheet and web press technology for offset-lithography, flexography, screen process, and digital printing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite: GIT 303 |
| GIT | 334 | Image Capture and Manipulation | Theory and application of advanced image editing and raster techniques for reproduction and dissemination. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 335 | Computer Systems Technology | Computer technology; hardware, software, storage, networking, Internet, telecommunications, and information systems. Requires independent research. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Minimum 45 hours; Not for credit for the BS/GIT degree |
| GIT | 384 | Commercial Photography | Digital image capture, and output in a commercial studio emphasizing publishing workflow. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 402 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic technology prospective. Emphasizes how, why, and when new media can be used to enhance a Web site and the user's experience. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 237 (or GIT 337) OR BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 411 | Computer Animation | 3-D computer animation methods: rigging for video games, principles of animation, loops, skinning, blending, advanced modeling and motion. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 312 |
| GIT | 413 | Professional Portfolio Design and Presentation | Digital media portfolio design and production: planning, audience analysis, media selection, authoring, media formats, production, copyright considerations, marketing, and delivery. Requires capstone group project. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Graphics Information Technology Senior student |
| GIT | 414 | Web Site Design and Internet/Web Technologies | Web site design, authoring, standards, protocols, tools, and development techniques for commercial client-sided Web-based graphic information systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or BAS Applied Science (Graphic Information Technology) or BAS Applied Science (Internet & Web Development) major |
| GIT | 417 | Advanced Web Markup and Scripting | Industry-standard programming languages and techniques to create interactive graphic information Web sites and applications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or BAS Applied Science (Graphic Information Technology) or BAS Applied Science (Internet & Web Development) major. Credit is allowed for only GIT 417 or 519 |
| GIT | 418 | Multimedia Authoring, Scripting and Production | Production of multimedia projects using industry-standard authoring applications; client considerations and project documentation; user interface design, interactivity, media, and databases. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 417 |
| GIT | 432 | Graphic Industry Business Practices | Business practices related to press/prepress/Web industries; trade customs, cost analysis, marketing and management approaches. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Graphics Information Technology Senior student |
| GIT | 435 | Website and E-Commerce Strategies | Internet Web site management, security, marketing, and e-commerce business models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 414 |
| GIT | 437 | Color Reproduction Systems | Scientific analysis for the engineering of color reproduction systems and color models used in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 334 |
| GIT | 450 | Digital Workflow in Graphic Industries | Digital production system analysis for content creation, automation output of graphic information to print and Web, including networking and job tracking. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 333; GIT 237 (or GIT 337) OR BAS student in Graphic Information Technology or Internet & Web Development |
| GIT | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Minimum 90 hours; Pre/Co-requisites: GIT 413; GIT 432; Credit is allowed for only ETM, GIT or TMC 480 |
| GIT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | |
| GIT | 490 | Advanced Commercial Photography | Studio-based class focusing on set design, advanced photographic techniques, raw workflow, marketing, business, and digital rights management. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 384 |
| GIT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |

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| GIT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GIT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-7 | | |
| GIT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 502 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic information technology prospective. Emphasizes how, why and when new media can be used to enhance a Web site and the user's experience while maintaining branding cohesively across all technologies. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Degree- or nondegree-seeking graduate; Credit is allowed for only GIT 502 or 598 (New Media Internet Technologies) |
| GIT | 515 | Website Design and Technologies | Standards, tools and techniques for creating websites, with emphasis on designing for multiple devices and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only GIT 414 or GIT 515 or GIT 598 (Website Design and Internet/Web)s |
| GIT | 519 | Advanced Scripting for the Web | Uses industry-standard markup and scripting languages to develop interactive websites and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIT 417 or GIT 519 or GIT 598 (Advanced Internet Programming) |
| GIT | 537 | Current Issues in Quality Assurance | Directed group study of selected issues relating to quality assurance in the printing, publishing, and graphic information industries. Requires graduate group leadership. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 538 | Personnel Development for the Graphics Industry | Employee training and development specific to production and management in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 540 | Cross-Media Design Solutions | Universal design theory, creative problem solving, and case study applications for print, Web, and new media products of the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 541 | Graphic Information Systems | Graphic information systems common to the workplace; graphic user interfaces for online databases, geographic, industrial, architectural, and management applications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 542 | Information Design and Usability | Design and technology solutions focusing on how information is organized graphically to communicate and how website usability is employed to improve human interaction with inline information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 573 | Color Metrology | In-depth study and analysis of systems used to manage color reproduction in the graphic arts industry and information technology. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Color Reproduction Systems) |
| GIT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Graphic Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 101 | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |

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| GLG | 102 | Introduction to Geology II (Historical) | Basic principles of applied geology and the use of these principles in the interpretation of geologic history. Both GLG 102 and 104 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & H | |
| GLG | 103 | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | |
| GLG | 104 | Introduction to Geology II-Laboratory | Lab techniques involving map interpretation, cross sections, and fossils. Both GLG 102 and 104 must be taken to secure SG general Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | Co-requisite: GLG 102 |
| GLG | 108 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| GLG | 110 | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & G | |
| GLG | 111 | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | |
| GLG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GLG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 301 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; GLG 101, GLG 102, GLG 110, GPH 111 or SES 121; MAT 117 or higher. Credit is allowed for only GLG 301, GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| GLG | 304 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| GLG | 305 | Dynamic Earth | Emphasizes the link between Earth's interior and surface, focusing on Earth systems and cycles, such as observation and modeling of the geometry and motions of Earth's rigid outer shell, the tectonic plates, and how they are coupled to the geologic record, the nature of Earth's internal structure, and convective motions within the planet. Specific topics include: (1) essentials of Earth's dynamic interior (models for physical and chemical evolution); (2) essentials of lithosphere evolution (cooling of oceanic plates, the age of the Earth, and continental formation); (3) multi-scale tectonics (plate tectonics, continental deformation, mountain building, tectonic context of metamorphism); (4) essentials of volcanism in a tectonic context; (5) geodynamic context of plate boundaries; and (6) chemical cycles (role of the solid crust and mantle for transporting, storing, and cycling water and minerals). Provides an essential global context for studies of Earth and Environmental Science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: GLG 101 or SES 121 with C or better; MAT 170, 210, or 251 with C or better; CHM 107 or higher, PHY 101 or higher, or BIO 100 with C or better. Credit is allowed for only GLG 305 or 310 |
| GLG | 310 | Structural Geology | Geologic structures and the mechanical processes involved in their formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 101 or SES 121 with C or better; MAT 170, 210 or 251 with C or better; Credit is allowed for only GLG 305 or 310 |
| GLG | 321 | Mineralogy | Crystal chemistry, crystallography, mineral identification, origin and occurrence of minerals, systematic mineralogy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | Prerequisite(s): CHM 113 (or both CHM 111 and 117 or 114) with C or better; MAT 170, 210, 265 or 270 with C or better; |
| GLG | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GLG | 327 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone—in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: (GLG 101 & GLG 103) or (SES 121 & SES 123) with C or better; MAT 170 or higher or PHY 101 or higher or CHM 107 (or 113 or 114), or BIO 100 or higher, all with a C or better. Credit is allowed for only GLG 327 or SOS 374 |
| GLG | 362 | Geomorphology | Land forms and processes that create and modify them. Lab and field study of physiographic features. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 101 or SES 121 with C or better; MAT 266 or 271 with C or better |
| GLG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 400 | Earth and Space Exploration Colloquium | Presentation of recent research by faculty and guests. Written assignments required. 1 semester hour required for Geological Sciences majors; may be repeated for a total of 2 semester hours. | N | LEC | Y | YGB | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| GLG | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in geological sciences. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | C | |
| GLG | 404 | Fundamentals of Planetary Geology | Surveys planetary topics, including impacts, tectonics, and volcanism on planetary objects, and use of spacecraft data, including geological mapping. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 101 (or GLG 102) or SES 121 (or SES 122) with C or better |
| GLG | 406 | Geology of Mars | Geological evolution of Mars through analyses of spacecraft data, theoretical modeling, and study of terrestrial analogs; emphasizes current work. Possible field trips to examine Arizona geology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 410 | Computers in Geology | Geological computer skills including data processing, visualization, presentation, numerical analysis, software and hardware applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Pre-requisites: GLG 101 or SES 121 with C or better |
| GLG | 418 | Geophysics | Solid earth geophysics; geomagnetism, gravity, seismology, heat flow. Emphasizes crust and upper mantle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: MAT 272 or 267 with C or better; PHY 131 and 132 or PHY 151 with C or better |
| GLG | 419 | Geodynamics | Emphasizes application of continuum principles to geological problems, including lithospheric stresses, heat transfer, fluid mechanics, and rock rheology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite(s): MAT 267 or MAT 272 with C or better; PHY 131 and 132 (or PHY 151) with C or better |
| GLG | 420 | Volcanology | Distribution of past and present volcanism, types of volcanic activity, mechanism of eruption, form and structure of volcanoes, and geochemistry of volcanic activity. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: Engineering, Math or Science major; Minimum Junior standing |
| GLG | 422 | Planetary Volcanology | Studies the effects of planetary environments and magma compositions on styles of volcanism and the nature of volcanic products on the terrestrial planets and outer planet satellites. Overview of volcanism on specific planetary objects; analysis of spacecraft image data, basic mathematical volcanic modeling, and reviews of key papers. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: AST 111 (or AST 112 or GLG 101 or 102 or 110 or GPH 111 or SES 121); MAT 271 or higher; Credit is allowed for only GLG 422 or 494 (Planetary Volcanology) |
| GLG | 424 | Petrology | Origin of igneous and metamorphic rocks. Optical mineralogy, hand specimen identification, and thin-section analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 321 with C or better |
| GLG | 430 | Paleontology | Introduces concepts and analytical techniques in biogeology, paleobiology, paleoecology, and paleoenvironmental reconstruction from the fossil record. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 102 (or SES 122) with C or better; GLG 104 (or SES 124) |
| GLG | 435 | Sedimentology | Origin, transport, deposition, and diagenesis of sediments and sedimentary rocks. Physical analysis, hand specimen examination, and interpretation of rocks and sediments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: GLG 102 (or SES 122), 321 |
| GLG | 441 | Ore Deposits | Origin, occurrence, structure, and mineralogy of ore deposits. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites with C or better: GLG 101 (or SES 121), GLG 310 (or 321) |
| GLG | 451 | Field Geology I | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; Pre/Co-requisite: GLG 321 |
| GLG | 452 | Field Geology II | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; GLG 321 with C or better; GLG 451 with C or better |
| GLG | 455 | Advanced Field Geology | Geologic mapping in igneous, sedimentary, and metamorphic terrains of the Basin and Range province of Arizona. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | |
| GLG | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| GLG | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and minerals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 464 | Solving Environmental Problems | Capstone course intended primarily for seniors in the Earth and Environmental Studies degree program. Hybrid self-study design project workshop guided by faculty, in which student teams research and develop plans for a viable solution to a real environmental problem in the American Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): Earth and Environmental Sciences BA seniors; GLG 305, 325 or 327 with C or better |

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| GLG | 470 | Hydrogeology | Geology of groundwater occurrence, aquifer and well hydraulics, water chemistry and quality, contaminant transport, remediation. Emphasizes quantitative methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| GLG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| GLG | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better. Credit is allowed for only GLG 485 or CHM 485 |
| GLG | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: CHM 302, GLG 321 or GLG 481 with C or better. Credit is allowed for only CHM 489, GLG 489 or 490 (Field Geochemistry) |
| GLG | 490 | Topics in Geology | Special topics in a range of fields in geology. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GLG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 495 | Undergraduate Thesis | Guided research culminating in the completion and presentation of an undergraduate thesis based on supervised research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| GLG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 500 | Earth & Space Exploration Colloquium | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 581 | Isotope Geochemistry | Geochemistry and cosmochemistry of stable and radioactive isotopes; geochronology; isotope equilibria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GLG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| GLG | | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | |
| GLG | | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| GLG | | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG & G | |
| GLG | | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | |
| GPH | 111 | Introduction to Physical Geography | Spatial and functional relationships among climates, landforms, soils, water, and plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | Credit is allowed for only GPH 111 or 411 |
| GPH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GPH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 200 | Orientation to Geography | Basic introduction to the Department of Geography faculty, undergraduate graduation requirements, and possible jobs and skills in geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | |

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| GPH | 210 | Society and Environment | Examines the interaction among social processes, key environmental issues, and nature's role as a resource at global and regional scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 211 | Landform Processes | Laboratory science class on earth-surface processes, with exercises emphasizing how erosion, transportation, and deposition modifies landforms. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | |
| GPH | 212 | Introduction to Meteorology | Fundamentals of weather and climate, including basic atmospheric processes and elements. Students whose curricula require a lab course must also register for GPH 214. Both GPH 212 and 214 must be taken to secure SQ General Studies credit | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SQ | |
| GPH | 213 | Introduction to Climatology | Fundamentals of meteorological/climatological analysis, including terminology and symbology. Recommended for meteorology/climatology program students. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SG | |
| GPH | 214 | Introduction to Meteorology Laboratory | Introduces basic meteorological/climatological data and measurements. Suggested concurrent enrollment in GPH 212. Both GPH 212 and 214 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SQ | |
| GPH | 215 | Introduction to Climatology Laboratory | Fundamentals of meteorological/climatological map analysis and interpretation. Recommended for meteorology/climatology program students. May be taken concurrently with GPH 213. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SG | |
| GPH | 267 | Extreme Weather | Introductory survey of extreme weather and climate processes and the often disastrous consequences at the intersection of human operations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| GPH | 275 | Geography of Cyberspace | Focuses on the relationship between geography and human's use of (and creation of) Internet and communications technologies to interact with each other over space and time. Studies the cyberspaces that they produce and their impacts on the information society. Topics include cyberpunk and space in popular culture; computer spaces, virtual worlds, and gaming; mapping cyberspace; bots, crawlers, and viruses; cyberspace law; cyberspace as social media; historical cyberspaces; the Digital Divide; geographies of e-commerce; mobile cyberspaces; cyber-place; and code/space. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 314 | Global Change | Response of Earth's natural systems (atmosphere, hydrosphere, lithosphere, biosphere) to past environmental change, and effects of potential future changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & G | Pre-requisite: Minimum 45 hours |
| GPH | 381 | Geography of Natural Resources | Nature and distribution of natural resources and the problems and principles associated with their use. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 401 | Topics in Physical Geography | Open to students qualified to pursue independent studies. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GPH | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in discipline. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | C | |
| GPH | 405 | Energy and Environment | Sources, regulatory and technical controls, distribution, and consequences of the supply and human use of energy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Minimum 75 hours; Credit is allowed for only GPH 405 or 505 |
| GPH | 409 | Synoptic Meteorology I | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: MAT 270 with C or better; Pre/Co-requisite: PHY 121 |
| GPH | 410 | Synoptic Meteorology II | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: GPH 409 with C or better |
| GPH | 412 | Physical Meteorology | Physical processes in the earth-atmosphere system on regional and global scales; concepts and analysis of energy, momentum, and mass balances. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 111, MAT 270, PHY 121 and PHY 122 with C or better. Credit is allowed for only GPH 412 or GPH 591 (Physical Meteorology) |
| GPH | 413 | Meteorological Instruments and Measurement | Design and operation of ground-base and aerological weather measurement systems. Collection, reduction, storage, retrieval, and analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 213 with C or better |
| GPH | 414 | Climate Change | Surveys three climate research areas: paleoclimatology, theories (e.g., greenhouse warming), numerical modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Prerequisite(s): GPH 111 (or GPH 213 or 314) |

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| GPH | 418 | Landforms of the Western United States | Studies landforms and geomorphic processes in the western United States, including lecture, topographical maps, aerial photographs, satellite imagery, and field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| GPH | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: BIO 181,GPH 111 or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| GPH | 433 | Alpine and Arctic Environments | Regional study of advantages and limitations of the natural environment upon present and future problems involving resource distribution, human activities, and regional and interregional adjustments. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Credit is allowed for only GPH 433 or 598 (Alpine & Arctic Environments) |
| GPH | 474 | Dynamic Meteorology I | Large-scale atmospheric motion, kinematics, Newton's laws, wind equation, baroclinics, vorticity, and the midlatitude depression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 271, PHY 131, PHY 132 with C or better |
| GPH | 475 | Dynamic Meteorology II | Topics in climate dynamics. General circulation, numerical modeling, teleconnection phenomena, and surface-atmosphere interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite: GPH 474 with C or better |
| GPH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GPH | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| GPH | 491 | Geographic Field Methods | Field techniques, including use of aerial photos, large-scale maps, and fractional code system of mapping; urban and rural field analysis to be done off campus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GPH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 505 | Energy and the Environment | Sources, regulatory and technical controls, spatial distribution, and consequences of the supply and human use of energy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Credit is allowed for only GPH 405 or 505 |
| GPH | 511 | Fluvial Processes | Geographical aspects of processes of river erosion, transportation, sedimentation: emphasizing spatial characteristics of forces, resistance, landforms, sediment; includes computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP or GPH 535 |
| GPH | 537 | 13 Ways Nature Can Kill You | Examines aspects of specific natural disasters (e.g., tornadoes, hurricanes, tsunamis). Addresses each topic in terms of the scientific background of each disaster, the social concerns and overview of historical occurrences. Discusses safety recommendations for each disaster. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 569 | Digital Analysis of Remotely Sensed Data | Focuses on the digital image processing of remotely sensed data for earth resource analysis and applications. Provides the skills and knowledge to apply digital remote sensing techniques for biophysical and environmental planning and problems. Through laboratory work, students have opportunities to practice concepts and techniques learned in the lecture part. Requires a reasonable background in college algebra and basic statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GPH 394 (Digital Analysis of Remotely Sensed Data), 569 or 598 (Digital Analysis of Remotely Sensed Data) |

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| GPH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 596 | Advanced Spatial Statistics | Multivariate and advanced statistical techniques including Box-Jenkins modeling and spectral analysis. Requires project papers and presentations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 620 | Remote Sensing | Remote sensing for the MAS-GIS program. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GPH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 101 | Designing Life | Helps students develop strategies to successfully navigate their education experience. Focuses on critical and reflective thinking. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 111 | Graphic Design History I | Surveys development of visual communication from its origins to the 20th century. Investigates significant technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| GRA | 112 | Graphic Design History II | Surveys contemporary and 20th-century graphic design. Investigates relationships among graphic design and related disciplines, technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 111 with C or better |
| GRA | 121 | Principles for Graphic Design I | Graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Graphic Design major. Corequisite(s): GRA 111 |
| GRA | 122 | Principles for Graphic Design II | Continued exploration of graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): GRA 121 with C or better; Environmental Design or Graphic Design major. Corequisite(s): GRA 112 |
| GRA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 220 | Design Drawing I | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for graphic design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 122 with C or better; Passed Milestone; Co-requisites: GRA 221; GRA 222 |
| GRA | 221 | Letterform | Drawing of letterforms with focus on proportion and structure. Introduces letterform nomenclature and classifications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 222 |
| GRA | 222 | Visual Communication I | Theoretical and applied studies in shape, drawing, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 221 |
| GRA | 223 | Typography | Theoretical exercises in spatial and textual qualities of type. Problems in tension, activation, and balance. Exercises in simple typographical applications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 221 with C or better; Co-requisite: GRA 224 |
| GRA | 224 | Visual Communication II | Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 222 with C or better; Co-requisite: GRA 223 |
| GRA | 225 | Communication/Interaction Design Theory | Theory related to the design of communication artifacts and interaction within various media environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 321 | Technology for Design I | Explores the process of technology in design. Projects interface with GRA 361. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design student; Co-requisite: GRA 361 |
| GRA | 322 | Technology for Design II | Emphasizes advanced technology in design problems. Projects interface with GRA 362. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 321 with C or better; Co-requisite: GRA 362 |
| GRA | 345 | Design Rhetoric | Develops critical thinking and expression of ideas in concise and persuasive written and spoken form. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Architecture, Digital Culture (Design), Design Studies, Environmental Design, Graphic Design, Industrial Design, Interior Design, Landscape Architecture major |

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| GRA | 361 | Visual Communication III | Explores methodologies of strategic communication, development of visual systems, and information design ideation processes leading to applied projects in print and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 223 & 224 with C or better; Co-requisite: GRA 321 |
| GRA | 362 | Visual Communication IV | Comprehensive studio projects with emphasis on production processes leading to multidisciplinary applied projects in print, 3-D space, and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 361 with C or better; Co-requisite: GRA 322 |
| GRA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 401 | Creative Environment | Explores and investigates theories of the psychology of space, psychology of people in space, and the psychology of objects as it pertains to creativity and the creative environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 421 | Exhibit Design | Familiarization with the processes associated with the design of exhibits, especially visual communication in 3-D. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 422; GRA 461 |
| GRA | 422 | Motion Graphics and Interaction Design | Discusses and explores theory related to the design of motion graphics and interaction through lectures and studio projects. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 322 with C or better; Co-requisites: GRA 421; GRA 461 |
| GRA | 423 | Advanced Interaction Design | Advanced discussion and exploration of theory related to the design of interaction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 |
| GRA | 424 | Advanced Media | Advanced exploration of digital media for communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 with C or better |
| GRA | 440 | Finding Purpose | Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 461 | Visual Communication V | Comprehensive studio projects with emphasis on design processes, including research, writing, critical thinking, practice, presentation, and analysis. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 421; GRA 422 |
| GRA | 462 | Visual Communication VI | Comprehensive studio projects pursued in cooperation with a public organization or private enterprise. All projects culminate in an exhibit. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 461 with C or better; Co-requisites: GRA 423; GRA 424 |
| GRA | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Pre-requisites: Department approval; Application process; Credit is allowed for only IND, GRA or MGT 464 |
| GRA | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | |
| GRA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisite: GRA 461 |
| GRA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| GRA | 501 | Creative Environment and Collaborative Leadership | Explores and investigates creativity and group collaboration leadership as it applies to the creative process. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): graduate Herberger Institute for Design and the Arts major |
| GRA | 521 | Advanced Visual Communication Design Studio I | Students translate data, stories and references that they collect in their research into masterful visual narratives. This studio is an inquisitive environment for exploring ways to frame information and weave stories with graphic design. Students acquire new knowledge as individuals and as a group. Emphasizes studio-based research, conceptual development and articulation of process, voice and a high level of design execution. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Visual Communication Design major. Credit is allowed for only GRA 521 or GRA 590 (Advanced Visual Communication Design Studio I) |
| GRA | 522 | Advanced Visual Communication Design Studio II | Encourages students to develop a framework for understanding the role of design systems, tools and objects as cultural artifacts and their reflection on social diversity. In particular, students focus on the cultural experience of collaborative consumption as it is fostered through visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 521. Credit is allowed for only GRA 522 or GRA 590 (Advanced Visual Communication Design Studio II) |
| GRA | 526 | Visiting Designers | Series of workshops (three per semester) in which students work closely with professionals and scholars in design and related disciplines. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 561 | Methods in Visual Communication I | Introduces methodology in visual communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 562 | Methods in Visual Communication II | Advanced theories and methodologies in visual communication. Emphasizes visual search as the synthesis of theory and practice. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: DSC 561 with C or better |
| GRA | 563 | Thesis Document Design | Emphasizes the construction of the final thesis document as a visual communication object and/or medium. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |
| GRA | 581 | Internship in Teaching Design | Develop assignments, conduct critiques, structure dialogue, make presentations, and assist in the instruction of studio and lecture courses. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |
| GRA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GRA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 621 | Advanced Visual Communication Design Studio III | Structured around the Design School traveling-studio model, this studio challenges students to work together to identify new design opportunities. For approximately one week during the semester, students travel to an off-campus location to examine a local condition there for which new design solutions are needed. Students return to ASU and continue working on the project for the semester. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 522 |
| GRA | 622 | Advanced Visual Communication Design Studio IV | As a culmination of study at the master level, the student is responsible for the development of an individually determined, semester-long project in response to defined objectives, periodic commentary by committee, and formal review. Students meet regularly with a faculty member to discuss assignments. Final faculty review and project book containing a written as well as graphic theoretical component are the forms of final presentation for this contribution to the field of visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 621 |
| GRA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Graduate Education | Graduate Education | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | Z1 | Graduate Education | Graduate Education | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRK | 101 | Elementary Ancient Greek | Ancient Greek grammar and vocabulary with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| GRK | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| GRK | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |

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| GRK | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GRK | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 201 | Intermediate Ancient Greek | Continuation of GRK 101. Ancient Greek syntax and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: GRK 101 with C or better |
| GRK | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| GRK | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| GRK | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 301 | Ancient Greek Literature I | Readings in ancient Greek prose; advanced grammar. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 201 with C or better |
| GRK | 302 | Ancient Greek Literature II | Continuation of GRK 301. Readings in ancient Greek poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 301 with C or better |
| GRK | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| GRK | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| GRK | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| GRK | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRK | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRK | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| GTD | 501 | Global Technology and Development | Major theories of economic, political, and social development, with particular emphasis on the impact of current technologies and globalization. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| GTD | 503 | Technology and the International Political System | Historical development of international political system, with emphasis on role of technology. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| GTD | 504 | Technology and Development in Zones of Conflict | Examines the special context of technology and development in zones of conflict that face wars among other nations, civil strife and dramatic political change. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 505 | Research Design in Technology and Development | Emphasizes techniques of primary data collection, effective uses of secondary sources, for qualitative and quantitative applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| GTD | 506 | Quantitative Analysis in Technology and Development | Uses correlation and regression-based multivariate statistical approaches in development studies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| GTD | 507 | Technology and Development in The Middle East | Examines historical and current patterns of political and socioeconomic development in the Middle East, including the role of technological development and current events. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite: graduate student (degree seeking or nondegree seeking). Credit allowed for only GTD 507 or GTD 598 (Political Dev in the Middle East) |
| GTD | 508 | Technology and Development in Latin America | Examines historical and current patterns of political and socioeconomic development in Latin America, including the role of technological development and current events. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only GTD 508 or 598 (Tech & Develop in Latin Ameri) |
| GTD | 509 | Technology and Development in North Africa | Examines historical and current patterns of political and socioeconomic development in North Africa, including the role of technological development and current events. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only GTD 509 or 598 (Technology and Development in North Africa) |

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| GTD | 510 | Technology and Development in Sub-Saharan Africa | Examines historical and current patterns of political and socioeconomic development in Sub-Saharan Africa, including the role of technological development and current events. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GTD 510 or 598 (Tech & Dev: Sub-Saharan Africa) |
| GTD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 100 | Introduction to the Science of Health Care Delivery | Introduces the science of health care delivery in the United States. Presents basic concepts in health services, health care organizations, and the delivery of safe, accessible, high-quality health care. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | |
| HCD | 101 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| HCD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-3 | | |
| HCD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| HCD | 301 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100; Credit is allowed for only HCD 301 or MED 450 |
| HCD | 302 | Health Care Management | Broad concepts and skills of management; application of these techniques to health care organizations. Students appreciate the variability of management styles and personalities and begin to develop their own style. Solidifies concepts through the use of case studies and asynchronous discussion boards. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: ECN 212; HCD 100 |
| HCD | 303 | Global Health Care Systems | Examines health care delivery systems internationally and explores contemporary issues affecting the institutions that provide health care and the people who seek health services. Covers the historical development of international health care systems, the organization and financing of systems of care, and the policy process and priority setting. Also covers current efforts at health care reform. Provides students with the necessary professional skills to be effective participants in efforts to evaluate and improve the delivery of health care nationally and internationally. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101 or MED 100 |
| HCD | 305 | Public and Community Health | Provides a broad survey of national, state and local community health sciences and services including cultural and ethnic issues. Examines the concepts of health and wellness and introduces health education as a foundation for population-based health care. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 and 101 |
| HCD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |

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| HCD | 400 | Interpreting the Scientific Literature | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100; HCD 300; MAT 210 |
| HCD | 402 | Health Economics | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: ECN 212; HCD 100 OR Medical Studies major with MAT 251 and MED 100 |
| HCD | 403 | Process Engineering | Core concepts in process engineering, specifically related to systems improvement and patient safety. The Institute of Medicine (IOM) advocates for integrating process engineering within health care to optimize health care outcomes. The IOM addresses multiple dimensions of health, including efficiency, effectiveness, safety, equity, patient-centeredness and access. These domains provide the framework from which faculty approach course content. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 and 101; HSC 300 and 330 |
| HCD | 404 | Advanced Concepts in the Science of Health Care Delivery | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 301 and 402; HSC 330 |
| HCD | 405 | Health Technology | Develops essential skills in identifying, analyzing and evaluating information technology applications in health care. Examples include electronic health records, computerized prescriber order entry, and computerized clinical decision support. Discusses the use of health technology in a variety of care settings, including outpatient and inpatient, and facilitate access to health care in resource-poor communities through the use of efficient technology. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisites: HCD 100; 101; 300; HSC 330 |
| HCD | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| HCD | 444 | Science of Health Care Delivery Internship | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | RSC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 300, 301 and 400 |
| HCD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HCD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| HCD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| HCD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 501 | Health Behavior and Statistical Tools in Health Environments | Provides an understanding of the statistical tools and principles of research design and methods in health behavior research in health environments. Encompasses an overview of quantitative, qualitative and mixed designs and focuses on the interpretation and communication of health behavior research through published reports and presentations. Incorporates research approaches and methodologies utilized in an array of content areas. Helps students gain a strong conceptual understanding and application of the statistical tools and research methods used to answer research questions of interest to health and health behavior researchers; it does not focus on mathematical treatments of underlying assumptions and formulae and related statistical problems sets or exercises. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HCD | 502 | Health Care Systems and Design | Introduces direct health care delivery structures and processes within and across health care settings, and their impact on the patient, family and community experience of the health care system and services. Examines the interaction among people, resources, delivery systems and built environments using perspectives, tools and strategies from multiple disciplines to evaluate strengths, gaps and opportunities for system improvements. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 510 | Interdisciplinary Approaches to Promotion of Healthy Lifestyles | Focuses on application of interventions to promote healthy lifestyles. Includes the theoretical and empirical foundations for clinical evidence for the implementation of healthy lifestyle interventions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Pre-requisite: HCD 501 with C or better |
| HCD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BMD 511 or HCD 511 |
| HCD | 520 | Interdisciplinary Perspectives on Health Disparities and System Access | Presents minority health and health disparities concepts and practices from an applied and action-oriented perspective for clinicians and administrators in order to transform systems of inequality and increase access and quality of care for ethnic minorities and other vulnerable populations. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Pre-requisites: HCD 501 and 510 with C or better |
| HCD | 521 | Law and Health Promotion | Analyzes clinical scenarios and case studies focused on the impact of health policy and law on health promotion strategies. Includes discussions of theoretical and empirical foundations supporting legal, ethical and economic decision making related to health promotion through law and policy. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisites: HCD 501 and 510 with C or better |
| HCD | 531 | The Health Care System | Health care delivery in the United States, including its composition, function and historical organization. The broad discipline of health services systems, health care organizations, and the delivery of safe, accessible, high-quality health care. Discusses the health care system from the perspective of various patient populations, including the aging patient population. Examines the influence of health care reform on health care delivery and costs. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 540 | Seminar in Science of Health Care Delivery | Focuses on how real-life leaders in the medical field deal with the changing environment, plan for vulnerability, and lead their organizations through these dynamic times. Discusses perspectives of how different countries deal with their health population, differentiate health from health care, and argues if health care is a right or a privilege. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Pre-requisite: HCD 501, 510 and 520 with C or better |
| HCD | 550 | Capstone: Applied Project | Discusses the results from student capstone projects, done in teams, and these projects related to broad topics explored during the prior coursework in the program. Capstone projects are identified early in the master's program in conjunction with and overseen by the degree leaders and the industry partners, and often a health care organization or health agency. These projects are worked on through the year with final written and verbal reports due in the last half of the semester. | N | RSC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Pre-requisite: HCD 501, 510 and 520 with C or better |
| HCD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |

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| HCD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | GRD | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 210 | Clinical Health Care Ethics | Healthcare ethics emphasizing analysis and ethical decision making at clinical and health policy levels for healthcare professionals. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisite: ENG 102,105 or 108 |
| HCR | 220 | Introduction to Nursing and Healthcare Systems | Introduces the social, political, and economic contexts in which the nursing profession and healthcare systems in the United States evolved. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | H | |

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| HCR | 230 | Culture and Health | Cultures of diverse groups and health/illness. Cross-cultural communication, awareness of own cultural influences, indigenous and alternative healing practices. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | C & G | |
| HCR | 240 | Human Pathophysiology | Chemical, biologic, biochemical, and psychological processes used in study of structural and functional alterations in health with selected therapeutics. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: Undergraduate Nursing students; BIO 201, BIO 202, CHM 101 or higher, MIC 205 and MIC 206 with C or better |
| HCR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 350 | Introduction to Clinical Research | Provides an introduction to the biomedical and clinical research field and associated operational processes. Examines clinical trial development phases, regulatory protections for human subjects, clinical research team specializations, research organizations, good clinical practice, institutional review board functions, and research funding mechanisms. Explores specialized career positions for nursing and allied health professionals. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HCR 350 or 394 (Introduction to Clinical Research Management) |
| HCR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| HCR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| HCR | 550 | Principles of Epidemiology for Healthcare | Introductory graduate-level course intended to provide students with fundamental epidemiology concepts and methods which can be applied to their field of interest. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 551 | Clinical Research Monitoring | Introduces clinical trial monitoring processes and procedures. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing major |
| HCR | 552 | Medical Device Development and Regulation | Comprehensive examination of the regulatory framework for the design, development, approval/clearance and marketing of medical devices in the United States throughout the product lifecycle. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management or MS Regulatory Science and Health Safety major |
| HCR | 553 | Quality Assurance and Clinical Research | Explores basic quality assurance techniques, standards and applications in the clinical research arena. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Clinical Research Management major or certificate |
| HCR | 554 | International Regulatory Affairs | Principles of international regulatory affairs and requirements for marketing regulated products globally. Key regulations that relate to medical product safety, the origins of these regulations, and marketing applications in major foreign markets. Covers similarities and differences among global regulations and those in the United States. | N | LEL | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing Regulatory Science & Health Safety student |
| HCR | 555 | Pharmaceutical Safety and Risk Management | Comprehensive examination of regulatory, legal, and scientific factors in pharmacovigilance and risk management and risk mitigation. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 556 | Quality Systems and Standards for Medical Products | Concepts and practices of total quality management in the context of FDA regulation of medical devices and pharmaceuticals. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 557 | Clinical Research Design and Methods | Explores basic clinical trial biostatistical methods in concert with clinical trial design and methods. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing or Clinical Research Management (Grad Certificate) |
| HCR | 558 | Technical Writing for the Regulatory Professional | Focuses on teaching and applying writing and presentation skills critical for regulatory professionals | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 559 | Regulatory Science Internship | Internship in the field at a regulatory agency or in a regulated industry. Practicum. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 560 | Regulatory Science Capstone | Culmination course integrating all components of regulatory core courses demonstrating knowledge and competency in the field of regulatory science. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 561 | Responsible Conduct of Clinical Research | Introduces concepts and policies for the responsible conduct of research (RCOR), institutional review boards, and dissemination of findings. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 562 | Clinical Research Data Management and Technology Implementation | Orientation to database design and management, technology assessment methods, auditing procedures for continuous quality improvement (CQI), and cost-effectiveness analysis (CEA). | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 563 | Fundamentals of Regulatory Affairs | Principles of clinical research management and regulatory affairs. Overview of national/international regulatory systems and agencies, and trends in conducting clinical research. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 564 | Capstone Clinical Research Management Project | Culmination course integrating all components of CRM core courses demonstrating knowledge and competency in designing and managing clinical trials. Students must have documentation of unencumbered professional license in the state where the capstone project will be completed, if required. | N | REC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Master of Science or Clinical Research Management Certificate student |
| HCR | 565 | Clinical Research Operations | Development, implementation, and operations of FDA clinical research trials, including budgeting, contract negotiations, site evaluation, marketing, project management, and reporting. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 566 | Capstone Clinical Research Management Project II | Culmination course integrating CRM degree coursework by demonstrating knowledge and competency in clinical research management planning, operations, and implementation processes. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 567 | Research Management and Contemporary Research Topics | Management and leadership principles integrated with contemporary research topics will be introduced. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Masters student or Nursing Graduate student |

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| HCR | 568 | Healthcare Project Management | Designed for graduate students and managers who desire to improve their effectiveness as project managers in the healthcare context. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 569 | Applied Principles of Data Management & Inferential Statistics in Healthcare Research | Applied principles of data management and inferential statistics in epidemiological, psychosocial, medical, nursing, and healthcare research. | N | SEM | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 570 | Introduction to International Health Systems, Professions, and Research | Introduces systems of international healthcare delivery, professions that provide healthcare delivery, and international research principles and practices. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 571 | Cultural Diversity and Healthcare Delivery | In-depth exploration of culturally diverse aspects of population health, including culture-bound syndromes, folk practices, assessment approaches, and interactions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 572 | International Healthcare Delivery Capstone | Culminating course integrating all International Health requirements that produce culturally responsive implementation and evaluation plan for the student's clinical practice. A portion of the course will be held in Mexico. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 573 | Principles of Health Science Research | Orientation to translational health sciences research methods, creating transdisciplinary research terms, and implementing transdisciplinary translational research. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Graduate student |
| HCR | 574 | The Institutional Review Board (IRB) and Human Research | Analyzes the value and functions of the Institutional Review Board (IRB), including the basis for the IRB's authority and the regulations that govern an IRB's activities. Topics include IRB operations and ethical issues. Explores the historical basis for regulating research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 561 |
| HCR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 691 | Seminar | A small class emphasizing discussion, presentations by students and written research papers. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| HDA | 101 | ASU & Herberger Institute Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university and the Herberger Institute for Design and the Arts. Explains and defines success with integrity, ASU resources and involvement, the importance of arts to society and the community, personality and learning style, and success in college and beyond. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Pre-requisites: Herberger Institute for Design and the Arts BA in the Arts or BA in Design Studies major; Credit is allowed for only HDA 101 or 194 (ASU Herberger Inst Experience) |
| HDA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 210 | Creativity and Innovation in Design and the Arts | Designed to get students thinking in a focused manner about creative practice and process. Many young designers and artists arrive at higher education in their discipline having taught themselves or having received a piecemeal education in the directed application of ideas. Aids students in knowing why and how they are creative. Covers types of creativity, how inspiration happens, how to take a project from idea to reality, how to work creatively in teams and how to fuse creative ideas with an understanding of environment to help realize work in socially useful ways. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Credit is allowed for only HDA 210 or 294 (Creativity & Innovation for Design and the Arts) |
| HDA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 310 | Socially Engaged Practice | Students gain a wide literacy in the community arts field through reading, discussion and technical practice. Examines theories and techniques of community-based project development. Pairs artists with communities to create art rooted in the needs, values, desires, triumphs and challenges of that community. Helps prepare the artist of the 21st century with skills to apply artistic practices in diverse contexts. | N | LEL | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 42 hours; Credit is allowed for only HDA 310 or 494 (Public Practice: Engagement & Community) |
| HDA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 410 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists--creative practitioners of all sorts--are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: HDA 310; Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HDA | 420 | Design and the Arts Business Administration | Design and the arts business seminar course that covers core business principles for design or arts businesses such as human resources, legal issues, accounting and finance. Asks with each of these areas how these disciplines uniquely work within design or arts settings. Investigates global business topics and discusses why ethics is integral to every design or arts business enterprise. Provides a broad understanding of design or arts business activities and practices, allowing more effective participation in business discussions in the future. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HDA 420 or 494 (Design & the Arts Bus Admin) |
| HDA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | |
| HDA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-7 | | |
| HDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-3 | | |
| HDA | 510 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research, and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists-creative practitioners of all sorts-are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |
| HDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 598 | Special Topics | Topical courses not offered in regular course rotation-e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 101 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| HEB | 102 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 101 with C or better |
| HEB | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| HEB | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |

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| HEB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HEB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 201 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 102 with C or better |
| HEB | 202 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 201 with C or better |
| HEB | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| HEB | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| HEB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 313 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 with C or better |
| HEB | 314 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 |
| HEB | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| HEB | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 347, SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| HEB | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 348, 394 (Israeli Culture and Society), JST 348, REL 311, or SLC 348 |
| HEB | 375 | Contemporary Culture of Israel | Intense study of aspects of historical, social, political, and cultural modern life in Israel. Beginning of Zionism to present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| HEB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| HEB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| HED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| HED | 510 | Introduction to Higher Education | Overview of American higher education, including philosophical, political, and social aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HED | 527 | Seminar: Student Affairs Administration | Organizational models, administrative competencies and skills, and emerging challenges of student affairs administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 573 | Applied Inquiry in Higher Education | Provides an overview of research, evaluation and assessment practices in higher education and strategies for utilizing these practices as professionals in higher education. Focuses on learning about and demystifying the process of scientific inquiry, with the intent of translating that knowledge to regular practice in a higher education professional career. It is not a highly technical methods course--no advanced knowledge of statistics or qualitative techniques is assumed--but instead gives practitioners a foundation in educational research design as well as the tools to be literate, thoughtful, critical and frequent consumers of research. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MEd Higher and PostSecondary Education major. Credit is allowed for only HED 573 or HED 591 (Applied Inquiry) |
| HED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 602 | Institutional Research/Strategic Planning | Provides an overview of policy research and planning in higher education at the campus system and governing/coordinating agency levels. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 611 | Curriculum and Instruction | Curriculum development, instructional organization, and improvement of instruction in higher education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 620 | Diversity in Higher Education | Overview of the demographic profile of college students, faculty, and staff. Addresses issues of access, retention, and development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 634 | The American Community College | Philosophy, history, curriculum, faculty, students, organization, financing, research, policy and current issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 644 | Higher Education Finance and Budgeting | Financial planning and budgeting in higher education institutions. Issues related to financing public and private colleges and universities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 649 | Law of Higher Education | Analyzes legal issues related to higher education; examines key court decisions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 668 | Grant Writing and Grant Makers: The Washington Context | Develops successful proposals for educational research projects. Students gain experience writing for federal agencies, reviewing, and being evaluated on grant proposals. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only CPY or HED 668 |
| HED | 679 | The American College Student | Overview of American college student from demographic, background characteristics, and values/attitudes/perspectives. Includes access, persistence, and degree completion. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 687 | Governance, Coordination, and External Influences in Higher Education | Study of governance and coordination in higher education systems and the impact of external forces on them. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HED | 688 | Organizational Theory | Major views of organizations and their influence on role definition and participant behaviors in educational organization. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 689 | Leadership in Higher Education | Theory and practice of leadership and administration in higher education institutions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 701 | Higher Education Doctoral Proseminar | Students read and discuss recent writings on the sociology of higher education and explore research interests as well as identities as educational researchers. Visits to several types of higher education institutions in the state of Arizona to meet various program faculty who introduce their interests as researchers and practitioners. Learn better understanding of the challenges and promise of higher education as an academic field and of themselves as researchers and practitioners. Time also spent discussing the dissertation and the writing process. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 702 | Critical Policy Issues In Higher Education | How great expectations in Washington are dashed in Oakland, Pressman and Wildavsky (1984) state that "policies imply theories--Whether stated explicitly or not, policies point to a chain of causation between initial conditions and future consequences." Policy can be broadly defined as a principal, plan, or course of action undertaken by governments, organizations, or individuals and designed to influence and determine decisions and actions. Many assumptions made by policy makers and other constituencies as well as competing social and political considerations shape the development of policy in higher education. Given the importance of federal and state public policy-making to higher education, we examine the effect of public policy on the functioning of colleges and universities and explore the various facets of public policy issues. Examines critical policy issues for higher education and the assumptions underlying their development. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 703 | Institutional Research and Evaluation in Higher Education | Higher education professionals (e.g., administrators, faculty, and researchers) are expected to develop an understanding of and appreciation for the role of research, analysis, and evaluation. Institutional research and evaluation are important functions in the advancement of colleges and universities. These functions help to maintain efficacy within educational organizations by providing vital data and analysis used in planning, decision-making, and policy development. Designed to develop a deep understanding of the contextual and practical applications of research and evaluation within higher education institutions. Students develop skills and execute techniques that are critical to conducting institutional research and evaluation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 704 | Qualitative Case Study Approaches For Policy Research In Higher Education | Provides advanced graduate students with instruction in qualitative case study research approaches as applied to questions of higher education policy. Emphasizes individual and group interviewing as techniques for qualitative case study data collection, coding, and analysis. Particularly useful for advanced doctoral students who plan to conduct a qualitative dissertation related to a higher education policy topic. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |

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| HED | 705 | Ethics, Diversity, and Educational Leadership in Higher and Postsecondary Education | Students read and discuss recent writings on ethical decision making as related to the context of higher and postsecondary education. According to Shapiro & Gross (2008), "educational leaders have always had to make important decisions that affect the studies and lives of the next generation." St. John (2009) underscores the importance to ethical practice of understanding critical higher education issues in organizational practice, the gaps between moral beliefs and actions, and improving equity in organizations. Doctoral students review theoretical concepts related to ethical decision making and apply them to moral dilemmas in higher and postsecondary education leadership, policy-making, and organizational change. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 707 | Higher Education Institutional Types and Innovative Initiatives | Students gain an in-depth understanding of the various types of higher and postsecondary education institutions in the United States, including two-year and four-year colleges and universities, historically Black colleges and universities (HBCU's), Hispanic-serving institutions (HSI's), tribal colleges, women's colleges, faith-based colleges, and for-profit colleges. Covers current classification system used to group each institutional type. Examines the contribution of each institutional type to the development of American higher education, their current status, and potential futures. Studies exemplary programs, within various institutional contexts, that seek to address the academic needs of diverse student communities. Guest speakers and an out-of-state institutional site visit provide opportunities for students to interact with and learn from faculty and administrators within institutional contexts. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HES | 301 | Adult Fitness I | Physical fitness and benefits of exercise. Emphasizes fitness assessment and designing an individualized assessment program. Y/E grade only. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Credit is allowed for only HES 301, EPE 301,325, 494, HES 301 or HES 494 |
| HES | 302 | Adult Fitness II | Continuation of HES 301. Y/E grade only. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: HES 301 completed with Y grade; Credit is allowed for only EPE 301, 325, 494 or HES 302 |
| HES | 303 | Adult Fitness III | Continuation of HES 302. Y/E grade only. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: HES 301 with Y grade; HES 302 with Y grade; Credit is allowed for only EPE 301, 325, 494 or HES 303 |
| HES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| HHE | 510 | Design and Health | Introduces health design core concepts while focusing on evidence-based design research to demonstrate how healthcare environments impact well being. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 524 | Healing Environments: Lessons from the Field | Provides students with the opportunity to learn valuable lessons from the field by engaging experts from fields and disciplines that shape the design of healthcare and healing environments. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Pre-requisite: Degree- or Nondegree-seeking graduate OR Senior with minimum 108 hours |
| HHE | 540 | Current Issues in Health Design | Explores and systematically investigates current issues in health that are driving the current and future directions of the healthcare industry, including the design of healthcare and healing environments. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate OR Senior with minimum 108 hours |
| HHE | 566 | The Healing Experience Research Lab | Connects spatial relationships and healthcare user needs through design, clinical delivery, and architecture. Applying research outcomes to the built environment. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Science in Design or Master of Healthcare Innovation student; HHE 510 and HHE 540 with B or better OR Master of Architecture, Bldg Des/Energy Perform/Bldgs MS, Master of Landscape Architecture, or Master of Urban Design |
| HHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 591 | Seminar | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| HIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 494 | Special Topics | | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HON | 171 | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisites: Barrett Honors student; Maximum 75 hours |
| HON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors students; Maximum 60 earned hours |
| HON | 272 | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Prerequisite(s): Barrett Honors student |
| HON | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 310 | Justice and Law | Philosophical study of theories of justice in relation to law and morality. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |
| HON | 317 | Philosophers, Poets, and Revolutionaries in Latin America | A transdisciplinary honors course that introduces students to major intellectual currents in three regions of Latin America. | N | REC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |
| HON | 366 | International France | Offered in France, course utilizes the "city as text" to analyze the construction of national identity. | N | PRA | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 370 | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | 372 | French Cultural Influences | Explores textual and cultural artifacts formative of French culture as a series of contacts and conflicts with other peoples and lifeways. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & G | Prerequisite(s): Barrett Honors student |
| HON | 378 | Culture and Society in England, Ireland, and Scotland | Chronologically explores texts, events, and sites for historical and cultural impact on development of England, Ireland, Scotland, and their countries' relationships with each other. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 379 | Romantics, Victorians, and Moderns | Examines the development and impact of various literatures, arts, and ideas in England, Ireland, and Scotland from the Romantic through the Modern period. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & G | Prerequisite(s): Barrett Honors student |
| HON | 380 | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas). Credit is allowed for only HON 380 or 394: Aesthetics and Society |
| HON | 381 | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 381 or 394: Science and the Self). Credit is allowed for only HON 381 or 394: Science and the Self |
| HON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student; Minimum 30 hours |
| HON | 410 | Philosophy, Politics, and Law | Topics in political and legal philosophy, including political authority, obligation and disobedience, the nature of crime and punishment. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |

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| HON | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR non-Business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| HON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors student; Minimum 45 hours |
| HON | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HON | | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisites: Barrett Honors student; Maximum 75 hours |
| HON | | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisites: Barrett Honors student; Maximum 75 hours |
| HON | | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisites: Barrett Honors student; Maximum 75 hours |
| HON | | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Prerequisite(s): Barrett Honors student |
| HON | | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas). Credit is allowed for only HON 380 or 394: Aesthetics and Society |
| HON | | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas). Credit is allowed for only HON 380 or 394: Aesthetics and Society |
| HON | | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas). Credit is allowed for only HON 380 or 394: Aesthetics and Society |

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| HON | | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas; Credit is allowed for only HON 381 or 394: Science and the Self |
| HON | | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas; Credit is allowed for only HON 381 or 394: Science and the Self |
| HON | | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas; Credit is allowed for only HON 381 or 394: Science and the Self |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student; Minimum 30 hours |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student; Minimum 30 hours |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student; Minimum 30 hours |
| HON | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors student; Minimum 45 hours |
| HON | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors student; Minimum 45 hours |
| HON | | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HPS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |

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| HPS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 311 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HPS | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 119 or higher; Minimum 30 hours; Credit is allowed for only HPS or PHI 313 |
| HPS | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314 |
| HPS | 322 | History of Science | Development and application of scientific thinking from ancient times through the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 323 | History of Science | Development and application of scientific thinking from the 18th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 325 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HPS | 330 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| HPS | 331 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| HPS | 332 | The Darwinian Revolution | Origin, nature, and subsequent history of the ideas of Charles Darwin. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 336 | Exploration and Science | 500-year survey of exploration as a historical process and cultural activity of Western civilization, with emphasis on its links with modern science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SB & H | |
| HPS | 340 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |
| HPS | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |
| HPS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 402 | Technology, Society, and Human Values | Values that motivate humankind to create technology. Areas of conflict and resolution of conflict between values and technology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 410 | Professional Values in Science | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Credit is allowed for only BIO 416 or HPS 410 |
| HPS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| HPS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HPS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| HPS | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, HPS, MBB, MIC, or PLB 496 |
| HPS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| HPS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| HPS | 511 | History of Science | Teaches crucial skills needed for graduate-level research in history of science, including (1) critical analysis of primary sources from different periods in the history of science and (2) critical analysis and familiarity with important trends in the secondary literature ("historiography of science"). | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 512 | Philosophy of Science | Serves as a graduate-level introduction to five central themes in philosophy of science, and as a means to begin to investigate new topics. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 513 | Decisions and Strategies | Explores topics in decision theory, game theory, social choice theory, epistemology, and related fields. May be repeated for credit. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HPS | 516 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 518, HPS or HST 516 |
| HPS | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HPS | 550 | Methods in History and Philosophy of Science | Introduces current methods in the practice of history and philosophy of science. Organized around major historiographical schools in the history of science such as social, institutional, intellectual, cultural, or feminist history of science and current concerns in philosophy of science such as causation, explanation, modeling, and epistemology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: graduate student (degree seeking or nondegree seeking). Credit is allowed for only HPS 620 or BIO 620 |
| HPS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HRC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| HRC | 310 | Social and Cultural Studies: Method and Theory | Covers how scholars in social and cultural studies think, argue, research and write. Traces the changing definition of fields such as American studies, ethnic studies, and women and gender studies. Studies these fields in relationship to 20th-century social movements and related theoretical categories including Marxism, cultural studies and class; feminism, gender and sexuality; and post-Colonialism, race and ethnicity. Covers basic archival and ethnographic research techniques underlying interdisciplinary research methods in these fields. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: Minimum 36 hours |
| HRC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 480 | Capstone: Practices and Approaches | Examines theoretical, methodological and epistemological issues in American studies, women and gender studies, and ethnic studies. Studies a wide variety of interdisciplinary theories, methodologies and epistemologies from an intersectional analysis of race, class, gender and sexuality in national and transnational contexts. Places special emphasis on historical definitions and debates on the relationship among theory, activism and praxis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: AMS 201 or ETH 100 or WST 100 |
| HRC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HRC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| HRC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HSC | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| HSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| HSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 210 | Cultural Aspects of Health | Examines how culture influences health, healthcare practices, barriers to health care, interactions with healthcare professionals, and health disparities in the U.S. Addresses the need for cultural competence among health practitioners. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | C | |
| HSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 300 | Complementary Healthcare | Evaluates the major components of complementary and alternative healthcare models and evidence-based recommendations related to complementary healthcare. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 210, HCR 230, or BIO 202 |
| HSC | 304 | Health Communication | Focuses on communicating topics related to health through an examination of theoretical frameworks, communication techniques, and different technologies including ehealth and mhealth. Addresses communication through channels that promote the health of individuals and communities. Topics may include clinician to client communication, peer to peer communication, health literacy, health in the media, and effective public health communication. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better |
| HSC | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Co-requisite: One of the following: ECD/EED/SED/SPE 396/397/478/496, PPE 474/484 or TEL 484; Credit is allowed for only HSC or PPE 310 |
| HSC | 320 | Applied Medical/Healthcare Ethics | Integrates the theory and practice of ethics within health-related disciplines and the application of bioethics by health science professionals, including health disparities. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | HU | Prerequisite(s): PHI 101 (or PHI 103, 306 or 314) OR Medical Studies major with PSY 101 (or SOC 101) |
| HSC | 330 | Healthcare Systems in the U.S. | Presents and integrates the organization, financing, and delivery of health services in the United States from the professional, organizational, community, and systems perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 320 |
| HSC | 332 | Healthcare Legislation | Provides an overview of the federal/state health policy legislative process, how it is implemented in institutions, and its effect on health science professionals and delivery of services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 320; HSC 330; Credit is allowed for only HSC 332 or 494 (Health Care Legislation) |
| HSC | 340 | Changing Health Behaviors | Comprehensive review of the theoretical bases of health behavior change. Students gain the knowledge to identify behaviors associated with optimal health and wellness and to develop theory-based intervention strategies and techniques to effectively influence behavior change. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; PGS 101; Credit is allowed for only HSC 340 or 394 (Changing Health Behaviors) |
| HSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |

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| HSC | 400 | Practicum in Health Sciences | Supervised experience in area of student specialization. Students are placed with an agency, organization, business, and/or facility that meets their specific academic goals. | N | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Health Sciences Senior student |
| HSC | 401 | Professions and Practices in the Health Sciences | Provides the opportunity to explore career options within the health sciences, compare credentialing/licensure requirements across the U.S., describe professional organizations and societies related to the health sciences, evaluate employment trends in the health sciences, and interview professionals currently active in a health sciences-related field. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 320 |
| HSC | 410 | Supporting the Health of Older Adults | Focuses on community and national policies and programs that affect the health of older adults, programs to improve access to healthcare as well as to improve overall health, issues related to family and professional caregiving, and future challenges related to caring for older adults. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; Credit is allowed for only HSC 410 or HSC 394, Supt Health Older Adult |
| HSC | 412 | Health Issues in Later Life | Focuses on health issues that primarily affect adults ages 50 years and over as related to nutrition, physical activity, environmental toxins. Focuses on exploring those factors known to promote healthy aging. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; Credit is allowed for only HSC 394(Health Issues in Later Life) or 412 |
| HSC | 420 | Evaluation of Health Sciences Research | Investigates methods of inquiry in health sciences and techniques for critiquing and interpreting research within the context of evidence-based practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): POS 401 (or PSY 230 or 231 or SOC 390 or STP 226 or 231 or 420) OR Medical Studies major with HCD 300 (or HSC 320) |
| HSC | 432 | Legal Issues in Healthcare | Legal doctrines provide protection of consumers, healthcare providers, and healthcare institutions with regard to healthcare delivery including access and cost. Provides an overview of the legal obligation and rights of private and public stakeholders in the delivery and receipt of healthcare services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 330 or 332 |
| HSC | 435 | Environmental Health Issues in the U.S. | Environmental health designed to address public health issues. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HSC 210. Credit is allowed for only HSC 394 (Envrnmtal Hlth Iss in U.S.) or HSC 435 |
| HSC | 440 | Health Coaching Concepts and Skills | Health coaching techniques and skills for health promotion professionals with emphasis on the practical application of brief intervention and motivational interviewing skills to promote healthy lifestyle changes. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; POS 101; Credit is allowed for only HSC 440, 498 (Health Coaching Concepts Skill) or NTR 530 |
| HSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): minimum 2.00 GPA; senior standing |
| HSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| HSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | |
| HSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| HSD | 501 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 501 or POS 571 |
| HSD | 502 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: HSD 501 or POS 571 with B or better. Credit is allowed for only HSD 502 or POS 572 |
| HSD | 503 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |

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| HSD | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 505 | Science and Technology Policy Workshop | Provides the capstone experience for the Professional Science Master's in Science and Technology Policy. Builds on theoretical and analytical work carried out in the program's required courses, providing an integrative experience that requires students to synthesize knowledge gained in prior coursework and apply it to real-world policy problems and settings. By blending exposure to national science and technology policy officials and nationally recognized academic experts, the workshop both advances student learning beyond that possible in the classroom while encouraging students to expand their abilities to connect theoretical and practical insights. At the same time, the workshop provides a natural transition from the student's formal classroom learning to their required applied policy internships, which commences upon the end of the workshop. | N | SEM | N | YGB | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 540 | Responsible Innovation and Research | Movements throughout Europe and increasingly the U.S. are beginning to consolidate the recognition of the profound effects that research outcomes have upon the world under the idea of responsible innovation and research. The responsible innovation and research pushes beyond the responsibilities of the individual researchers and addresses larger issues such as research agenda setting, management of large-scale research and innovation enterprises, funding priorities and innovation as a national policy priority. Explores the idea of innovation as a national policy, the practical and theoretical underpinnings of responsibility in the research world; the history, current state and future trajectories of responsible research and innovation. Focuses on the current literature in the field. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| HSD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 601 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 601 or POS 671 |
| HSD | 602 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. Continuation of HSD 601. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 602 or POS 672 |
| HSD | 610 | Colloquium | Regular meeting for the entire HSDST community. Includes outside speakers, student and faculty member presentations, and community discussions. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HSD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | GRD | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 220 | Health Care Organizations | Overview of United States healthcare delivery systems; financing, health policy, basic principles of budgeting, cost-benefit analysis, and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | H | |
| HSM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| HSM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 502 | Health Care Organization | Concepts, structures, functions, and values that characterize contemporary healthcare systems in the United States. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 505 | Managerial Epidemiology I | Basic constructs and measures of epidemiology. Epidemiologic study designs. Potential impact of chance, bias, confounding, on an epidemiologic study. Causal criteria; levels of evidence in epidemiological studies, implications and limitations of statistical association. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 561 or ECN 501 with C or better. |
| HSM | 512 | Healthcare Economics | Economics of production and distribution of healthcare services, with special emphasis on the impact of regulation, competition, and economic incentives. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 522 | Health Sector Information Management | Information technology and knowledge management applications in the health sector, including care delivery and financing institutions and in the pharmaceutical and biotechnology industries. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 542 | Healthcare Law | Legal aspects of healthcare delivery for hospital and health services administration. Legal responsibilities of the hospital administrator and staff. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 561 | Biostatistics | Aspects of descriptive statistics and statistical inference most relevant to health issues, including data, rates, and confidence intervals. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 564 | Health Care Finance | Overview of the acquisition, allocation, and management of financial resources by healthcare providers. Focuses on economic, financial, and accounting principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 565 | Introduction to Health Policy | Current policy issues in health through concepts of access, cost, and quality; issues relating to disease trends and policy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 566 | Managerial Epidemiology II | Basic principles of epidemiology, evaluation of etiology, natural history, intervention therapy, and disease prevention. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 575 | Health Policy Management and Evaluation | Provides students with the analytical techniques and real world experience to manage the implementation and evaluation of changes in health policy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 578 | Managing Clinical Trials | Introduces students to theoretical and practical aspects of randomized controlled clinical trial methodology. | N | LEC | N | GRD | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisite: HSM 505 |
| HSM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 589 | Healthcare Strategic Management | Capstone assessment of current policies, problems, and controversies across the broad spectrum of health services administration. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 106 | Asian Civilizations | Civilizations of China, Japan, and India from antiquity to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 107 | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 108 | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST or REL 111 |
| HST | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HST, POS 112 or HST 194 (Foundations of Democracy) |
| HST | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Entry Ed |
| HST | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Credit is allowed for only GCU or HST 114 |
| HST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 200 | Historical Themes | General introduction to selected themes in history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 201 | Historical Themes in Asia | General introduction to selected themes in Asian history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 203 | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 204 | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 210 | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | |
| HST | 211 | American Jewish History | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |

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| HST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| HST | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| HST | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| HST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, and urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301 |
| HST | 302 | Studies in History | Specialized topics in history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 303 | Studies in Asian History | Specialized topics in Asian history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 304 | Studies in European History | Specialized topics in European history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 305 | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 306 | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 307 | Studies in African History | Specialized topics in African history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 309 | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 310 | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 315 | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 316 | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| HST | 318 | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |

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|---------|----------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------------------------------------|-------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 320 | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 321 | Constitutional History/US to 1865 | Origin and development of the American constitutional system from colonial period through the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 322 | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 323 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and Africans Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| HST | 325 | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 326 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | 327 | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 329 | Women in 20th-Century U.S. West | Nuanced exploration of how women of various cultures have contended for and shaped the U.S. West, including the West of imagination. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| HST | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| HST | 333 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 335 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| HST | 337 | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 338 | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 340 | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 342 | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 343 | American Southwest | Development of the region from 1848 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 344 | Arizona | Emergence of the state from early times to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 345 | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |

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|---------|----------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|----------------------------------------------------|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 346 | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 347 | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 348 | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 349 | Early Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 5th through 10th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 350 | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 351 | Renaissance Europe | Culture of the Renaissance in Italy and Northern Europe from the 14th to the early 16th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 352 | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 353 | Old Regime in Europe | Society and culture of Europe during the 17th and 18th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 354 | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 356 | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 357 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | 358 | Jewish History from the Bible to 1492 | Continuity and change in political, legal, economic, and sociocultural history of the Jews from biblical through medieval times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 359 | Jewish History from 1492 to 1948 | Jewish history from early modern through modern times, highlighting emancipation, enlightenment, and Jewish responses to modernity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 360 | The Crusades: Religion & Conflict in the Middle Ages | Examines the origins, the development, and the outcomes of the movement that we call "crusades" by connecting the military aspect of the crusades to broader developments. Focuses primarily, but not exclusively, on the period 1095-1453. Geographically covers chiefly the Mediterranean, and, to a lesser extent, northeastern Europe. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours; Credit is allowed for only HST 360 or 394 (Crusades in the Middle Ages) |
| HST | 361 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | 362 | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 363 | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 364 | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 365 | World Wars I and II: Europe's Eastern Front | In-depth study of the history of the Eastern Front in Europe in the two world wars. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 365 or 394 (WWI and WWII Eastern Front) |
| HST | 366 | England to 1689 | In-depth examination of the political, economic, and social development of the English people to the late 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 367 | Modern Britain | In-depth examination of the political, economic, and social development in Britain from 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

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| HST | 368 | Culture and Imagination in European History | Topics in European cultural and intellectual history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 369 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| HST | 370 | Eastern Europe in Transition | Democratization, privatization, and identity transformations since the fall of communism in contemporary Eastern Europe and the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 371 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 371 or REL 377 |
| HST | 372 | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | 373 | Roman History I: Foundations and Republic | Traces the growth of Roman power from Rome's humble beginnings in the eighth century B.C. to its domination of the Mediterranean and the transformation of the Roman Republic into the Roman Empire after the Battle of Actium (31 B.C.). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 374 | Roman History II: The Roman Empire | The Roman Empire from the reign of the first emperor, Augustus (27 B.C.-A.D. 14), to that of Justinian (A.D. 527-565), focusing on the lives of the Roman emperors, the society and culture of the empire, and the profound changes that eventually contributed to the empire's collapse. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours |
| HST | 375 | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 376 | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 378 | Latin American Women: The National Period | In-depth study of the history of women, gender relations, and state policies in a broad continental setting, from independence to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 381 | South American Indian Religions | Introduces the sacred stories, ceremonies, and beliefs of Native South American peoples in their historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 381 or REL 332 |
| HST | 383 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| HST | 384 | China | Political, economic, social, and cultural history of the Chinese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 385 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HST | 386 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| HST | 387 | Japan | Political, economic, social, and cultural history of the Japanese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 388 | Japan | Political, economic, social, and cultural history of the Japanese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 389 | Japan Society and Values/Premod | Effects of economic and social transitions on personal and social values as reflected in the dramatizations of contemporary events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | 391 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |
| HST | 392 | Modern South Asia | In-depth study of modern South Asia from the 18th century to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 392, HST 303 (Modern South Asia) or HST 394 (Modern South Asia) |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |

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| HST | 397 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| HST | 400 | Topics in American Historical Periods | Focuses on specific periods in American history. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 402 | Topics in European Regional and National History | Focuses on the history of specific geographic regions or nations in Europe. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 404 | Conquest | How did Hernan Cortés and Francisco Pizarro defeat the Aztec and Inca Empires? Despite numeric inferiority, limited provisions, and little knowledge about the Americas, Cortés and Pizarro defeated advanced civilizations that had experienced warriors and millions of inhabitants. Possible explanations include the conquistador's valor, advanced weaponry, superior military strategy, Indian allies, and biological attacks. In their encounters with native peoples of the Americas, Europeans were not always conquerors. Alvar Núñez Cabeza de Vaca and Lope de Aguirre failed both in their attempt to conquer a large Indian civilization and in their effort to find mineral wealth. A few Europeans such as Bartolomé de Las Casas spoke out against the abuses committed against the Indians during the conquest. Explores these issues from the perspective of both Europeans and native peoples and looks at the long-term impact for Latin America and its peoples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L & G | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 404 or 494 (Conquest & Encounters) |
| HST | 405 | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 407 | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 409 | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 410 | Modern U.S., 1918 to 1945 | 1920s boom and the crash, the Depression and the New Deal response. The Second World War at home and abroad. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 411 | Postwar U.S., 1945-1973 | Cold War, prosperity, reform, and immense social and political change in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 412 | Contemporary U.S., 1973- Present | End of the Cold War, political crises, and cultural transformations in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| HST | 415 | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 416 | Western Rivers | Examines the relation between rivers, culture, and environment in the American West. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & H | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 418 | The Hispanic Southwest | Development of the Southwest in the Spanish and Mexican periods to 1848. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| HST | 419 | 20th Century Chicano/a History | Historical development of the Chicano community in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 423 | The Tudor Monarchy | Political, cultural, and social foundations of 16th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 424 | The Stuart Monarchy | Political, social, economic, and cultural developments in 17th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

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| HST | 426 | The British Empire | British imperialism and colonialism in Africa, the Americas, Asia, and the South Pacific. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 427 | French Revolution/Napoleonic Era | Conditions in Pre-Revolutionary and Revolutionary France; organization of France under Napoleon and impact of French changes upon Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 428 | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 429 | Modern Germany | Germany since 1871. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 431 | Eastern Europe and the Balkans, Pre-1914 | Empire and nation in Eastern Europe and the Balkans before World War I, emphasizing Hapsburg and Ottoman lands. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 432 | Eastern Europe the Balkans, 20th Century | Politics and culture in Eastern Europe and the Balkans from World War I to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 435 | The Russian Empire | Development of Russian imperial institutions and civil society from the 17th to the early 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 436 | The Soviet Experiment | In-depth study of Communist revolutionaries' rule of Russia, focusing on utopian culture, Stalinist terror, heroism in war, and the breakup of the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 438 | Modern Spain | Cultural, economic, political, and social development of modern Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 443 | The United States and Latin America | Latin American struggle for diplomatic recognition, attempts at political union, participation in international organizations since 1810, and relations between the United States and Latin America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 444 | Latin American Independence | History of independence movements throughout the Western hemisphere from the late 18th century until the mid-19th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G & H | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 445 | 20th-Century Cuba | History of Cuba from colonial era to formation of the early republic; political, economic, social development in late 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 447 | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | 448 | Mexican/U.S. Border | Analyzes the evolution of the Mexican/U.S. border region from the mid-19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 449 | Mexican Immigration to the U.S. | Assesses the evolution of immigration and emigration public policy since the mid-19th century. Seeks to contextualize the relationship between immigration and other elemental nation-state issues as the economy, education, identity, and civil rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 450 | Postmodern Mexico | Challenges historical myths about the evolution of the nation state and calls into question that globalization and transnationalism are only recent phenomena of the postmodern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G & H | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| HST | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| HST | 453 | The People's Republic of China | Analyzes major political, social, economic, and intellectual trends in China since the founding of the People's Republic in 1949. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 454 | History of Genocide | Examines the individuals and institutions responsible for the most infamous episodes of state-sanctioned violence in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G & H | |
| HST | 456 | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 459 | Gandhi and the Politics of Nonviolence | In-depth study of Gandhi and the Gandhian political philosophy and practice of nonviolence. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 55 hours. Credit is allowed for only HST 459 or HST 498, Gandhi: Politics of Non-Violence |
| HST | 464 | Women in Europe to 1750 | European women's diverse religious, ethnic, national and economic roles in society, culture, and politics in the pre-modern period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | Prerequisite(s): ENG 102, 105 or 108 with C or better; HIS 101 or 300 with C or better |
| HST | 465 | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |

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| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; ENG 102, 105, 108 with a C or better; Minimum 55 hours; Credit is allowed for only HST 480 or HST 530 |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | 496 | South, Southeast, and East Asia in the Global Matrix | In this capstone seminar, majors in Asia Studies take up broad comparative themes, integrating knowledge from the major's three tracks (East, South, and Southeast Asia) and executing a research project culminating in a major paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s) with C or better: ASB 240 (or GCU 240 or HST 111 or 240 or 245 or POS 240 or REL 240 or 245 or SGS 240 or 245); ENG 102 (or ENG 105, or 108); minimum 55 hours |
| HST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| HST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 502 | Public History Methodology | Introduces historical research methodologies, techniques, and strategies used by public historians. Readings, short papers, and guest speakers. Required for students in the public history concentration. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 511 | History of Science | Teaches crucial skills needed for graduate-level research in history of science, including (1) critical analysis of primary sources from different periods in the history of science and (2) critical analysis and familiarity with important trends in the secondary literature ("historiography of science"). | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 515 | Studies in Historiography | Methods and theories of writers of history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 516 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 518, HPS or HST 516 |
| HST | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HST | 525 | Historical Resource Management | Identification, documentation, and interpretation of historic period buildings, sites, and districts. Emphasizes interdisciplinary efforts among historians, architects, and anthropologists. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 527 | Historical Administration | Preparation of historians in administration of archives and historical sites, museums, societies, and offices in government agencies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 530 | Methods of Teaching Secondary History | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only HST 480 or HST 530 |

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| HST | 532 | Community History | Techniques and methods of community history emphasizing local resources. Required for community history option. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 535 | Teaching Secondary Social Studies | Emphasizes secondary educational methods of planning, teaching, and assessing appropriate content in the instruction of social studies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only HST 481 or HST 535 |
| HST | 555 | Comparative Historical Topics | Analyzes a variety of specific social, political, cultural, and intellectual topics. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credits allowed for only ASB 573 or HST 573 |
| HST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | |
| HST | | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | |
| HST | | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | |
| HST | | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | |
| HST | | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G & H | |
| HST | | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| HST | | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| HST | | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | |
| HST | | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | |
| HST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HST | | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |
| HST | | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

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| HST | American Southwest | Development of the region from 1848 to the present. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Arizona | Emergence of the state from early times to the present. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |
| HST | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | |
| HST | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Culture and Imagination in European History | Topics in European cultural and intellectual history. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | Contemporary America | The United States from 1945 to the present. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Contemporary America | The United States from 1945 to the present. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Modern Germany | Germany since 1871. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |
| HST | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |
| HST | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HST | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| HST | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HST | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| HST | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |

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| HST | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUD | 161 | Graphic Communication | Develops drawing skills and understanding of the graphic communication systems used by planning, homebuilding, and landscape architecture professions. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student |
| HUD | 201 | Introduction to Housing and Urban Development | Perspectives and issues concerning HUD. Guest lectures by interdisciplinary faculty and private, public, and non-profit practitioners. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 301 | Housing and Community Design and Development | Single- and multifamily housing, residential neighborhoods, and planned communities. Affordability in owner-occupied and rental housing. First-time, move-up, and adult markets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 302 | Housing Production Process | Development feasibility analysis, finance, contracts, land acquisition, community and permit presentation and negotiation, scheduling, cost control, marketing, and sales. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 361 | Housing and Urban Development Studio I: Residential Design and Development | Affordable residential design, development, and production process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; Passed Milestone; Co-requisites: HUD 301; HUD 363 |
| HUD | 362 | Housing and Urban Development Studio II: Community Design and Development | Neighborhood and new community design and development process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 361 with C or better; Co-requisites: HUD 302; HUD 364; HUD 403 |
| HUD | 363 | Housing and Urban Development Seminar I: Residential Design and Development | Affordable residential design, development, and production process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 301; HUD 361 |
| HUD | 364 | Housing and Urban Development Seminar II: Community Design and Development | Neighborhood and new community design and development process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 302; HUD 362; HUD 403 |
| HUD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 401 | Assisted Housing | Publicly subsidized and nonprofit housing. Policy, implementation, and administration. FHA, Section 8, FmHA, projects and scatter site, and tax considerations. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 402 | Community Revitalization: Problems and Strategies | Public policy and strategies for neighborhood revitalization and community renewal. Preservation and adaptive reuse, gentrification, neighborhood safety, and related socioeconomic concerns. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 403 | Advanced Topics in Housing and Urban Development | Varying topics, such as manufactured housing, homelessness, mortgage and finance in housing, housing abroad, marketing housing, and sustainable community development. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 461 | Housing and Urban Development Studio III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction, cost management, and marketing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 362 with C or better; Co-requisites: HUD 401; HUD 463 |
| HUD | 462 | Housing and Urban Development Studio IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 461 with C or better; Co-requisites: HUD 402; HUD 464 |
| HUD | 463 | Housing/Urban Dev Seminar III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction and cost management, and marketing. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; HUD 302 and HUD 364 with C or better. Co-requisites: HUD 401; HUD 461 |
| HUD | 464 | Housing and Urban Development Seminar IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 402; HUD 462 |
| HUD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Housing & Urban Development BSD student |
| HUD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| HUD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HUD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| HUM | 503 | Research and Writing in the Humanities | Systematic training in humanistic research and writing with particular attention to the interdisciplinary study of culture. | N | SEM | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 530 | Pop Culture America | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Division of Humanities | 3 | | |

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| HUM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IAP | 101 | Art, Artist, and Culture | Provides an approach to art, creativity, and culture in global, historical, and contemporary contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 102 | Foundations I: Performance Techniques and Composition | Focuses on practice-based studies of contemporary presentational strategies and techniques. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 103 | Foundations I: Interdisciplinary Digital Media | Digital media studies and application of contemporary artists, processes, and presentation practices in interdisciplinary arts. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 104 | Foundations I: Fundamentals of Sound Art | Investigates late 20th- and 21st-century sound art and our relationship with it. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 105 | Foundations I: Fundamentals of Visual Art | Focuses on contemporary aesthetic concepts and language for visual arts application. Introduces core concepts of visual design: visual elements, principles of design and the creative process. Exposes the basics of drawing, color theory, typography, 2D design and game design. Engages student in the fundamental aspects of design and scripting to build an adequate foundation and prepares for the next level of study of interdisciplinary art. Includes a gentle introduction to programming for art and game-making purposes. Additionally, studies the past and present accomplishments of artists and designers to help form the student's ability to perceive aesthetic qualities of art work and design. Guides discovery of an individual creative path that explores student's work within historical development of art and aesthetic significance of these developments in society and culture. Develops a creative path to study the creation of objects and digital means of expressing or conveying aesthetic concepts and ideas. Digital art making is an extension of the tradition of art making and this class is an amalgam of traditional and digital art making, emphasizing the symbiotic relationship between them. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | |
| IAP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 201 | Introduction to Interdisciplinary Arts | Considers interdisciplinarity in practical terms in all art forms. Also considers antecedents and cross-cultural issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 202 | Perspectives on Interdisciplinary Arts and Performance | Social, cultural, and historical examination of interdisciplinary art and performance and a survey of current interdisciplinary work and approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 301 | Energetic Systems of Art: Collaboration in the Arts | Identifies and explores the energetic systems at work in the creation, performance, and perception of art. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 302 | Cross-Cultural Perspectives on the Arts | Social and cultural perspectives of art and performance through a survey of historical and contemporary attitudes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 303 | Artists and the Contemporary American Experience | Explores the life of the contemporary American artist with respect to individuality, pluralism, gender, race, ethnicity, and regionalism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 304 | Traditions of the Avant-Garde and Experimental Art | Surveys 20th-century art movements and isms, including futurism, dada, surrealism, constructivism, realism, the Bauhaus, abstract expressionism, minimalism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |

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| IAP | 305 | 20th and 21st Century Art, Performance, and Media | Surveys artists, movements, and trends in the arts with an emphasis on interdisciplinary performance, media, and technology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 306 | Extended Traditions in Drawing | Explores alternative methods of rendering the drawn image. Emphasizes incorporating other art forms to inform students' individual work. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 307 | Art and War | Global interdisciplinary survey of the range of work created by artists in response to war, through time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 310 | Women in Art | Cultural, historical, and social issues relating to the seeming scarcity of women artists and changing social contexts for women artists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre/Co-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAP or IAS 310 |
| IAP | 321 | Music Composition I | Study and implementation of specific compositional theories and procedures. May be repeated for credit when topics vary. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 322 | Multitrack Digital Recording | Introduces students to theory and practice of Musical Instrument Digital Interface (MIDI) technology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 323 | Music and the Visual Arts | Histories and theories of music and visual arts with emphasis on convergences within 20th-century avant-garde traditions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 324 | The Voice and Performance | Involves all aspects of the human voice, including research, creation, and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 325 | Sound Performance: Exploring Alternative Performance Groups | Utilizes innovative sound ensembles to explore all aspects of sound and its place in various art forms. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Pre/Co-requisite: IAP 201 or 202 |
| IAP | 331 | Performance, Acting, and the Individual | Explores the concepts of the self, the subject, and the author as each pertains to the solo artist. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| IAP | 332 | Technical Production for Interdisciplinary Arts | Develops basic technical knowledge and application of fundamental stagecraft techniques used in the creation and presentation of performance works. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 333 | Directing for Performance | Explores various strategies for performance. Emphasizes nontraditional staging and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 334 | Conceptual Development in the Arts | Conceptual development processes in the arts from initial idea to formal project proposals, grants, and production plans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 or IAP 202 |
| IAP | 335 | Vocalization and Movement | Study, application, and coordination of vocal projection techniques with bodily movement competencies in presenting original and existing contemporary performance works. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 45 hours |
| IAP | 351 | Concept, Image, and Text | The generation of images and metaphors using various media and visual stimuli. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 352 | Seeing and Drawing | Develops drawing and seeing skills that are important not only to visual arts but also to music, dance, and theatre. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 354 | Visual Representation | Explores materials, processes, and aesthetic concepts of art making through various media with readings on cultural perspectives and contemporary theory. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Co-requisite: IAP 201 or 202 |
| IAP | 355 | Illusion and Vision | Inquiry into 2-D surfaces for visual representation and personal expression; includes readings on color theory, visual perception, and historical/cultural patterns. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 356 | Spatial Impressions | Investigates 3-D forms, the processes and concepts of physicality, and the environment with readings on spatial perception and cultural objects. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 360 | IAP Laboratory | Provides instructor-student contact time focusing on the technical instruction of media and technology applications. | Y | LAB | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | |
| IAP | 361 | Digital Editing and Media Literacy | Investigates the approaches used in digital editing with a focus on interactivity, graphics, audio, and desktop video. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or BA Digital Culture student |
| IAP | 362 | Games & Narratology | Focuses on design techniques for the writing of nonlinear and interactive stories in the video game development process. Compares and contrasts game writing with other creative writing such as short story, song writing, oral history, poetry, fiction and film. Examines, deconstructs and questions the game design approach commonly referred to as narratology. Inspects key texts in media and cultural studies for attitudes, ideas and thoughts on games and narrative in games. Uses materials, processes, and aesthetic concepts of level design and visual skills needed to create a video game using a game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 101 and 102 with C or better; IAP 105 with C or better |
| IAP | 363 | Sound, Image, and Media | Interdisciplinary arts projects for experimental approaches to relating sound and visual image, accompanied by survey of historical and contemporary material. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 364 | Documentaries | Media arts projects exploring new and experimental forms of visualization based upon an interdisciplinary survey of historical and contemporary examples. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 365 | Digital Interactivity | Combines graphics, video, and animation with digital authoring tools for creation of interactive multimedia Web sites. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 368 | Digital Graphic Technologies | Employs technology used in contemporary graphic designs to design concepts and techniques for modeling and representation applications. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 371 | Verbal Art | Examines varieties of verbal art in everyday life, literature, oral and literate cultures. Considers diverse cultural forms and values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IAP | 373 | The Critical Artist | Focuses on artists' critical thought, theorizing, and representation of art across disciplines and genres. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 375 | Contemporary Performance: Theories and Practice | Performance course focusing on elements of contemporary and digital performance in relationship to stage, new technologies, video, installations, and public art. Through interdisciplinary strategies, students gain tools to deepen their knowledge and range of performance. Requires students to engage in research, conceptualization, and the creation of new original work, combining classroom workshops, various readings, fieldwork, and production to emphasize interdisciplinarity, collaboration, and personal vision. Once theories and concepts are explored, students work in a conceptually based and physically rigorous environment toward producing new work, culminating in a final performance project. | N | STO | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 (or IAP 202), 361 |
| IAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| IAP | 421 | Composition: Process, Technique, and Style II | Advanced study of specific compositional theories and procedures; in-depth analysis of individual work. | N | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 422 | Contemporary Orchestration Practices | Traditional and experimental scoring techniques for small and large ensembles using MIDI technology, digital samplers, and traditional instruments. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 431 | Perspectives on Performance and Acting | Focuses on the interaction of the performer with media, alternative stagings, and collaboration with other performers. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 433 | Directing Workshop | Applies experimental directorial techniques to presentations and deconstruction of classical works including European and cross-cultural traditions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only IAP 433 or MAS 598 (Directing Workshop) |
| IAP | 434 | Production Laboratory | Develops original scripts into showcase productions. Students function as theatrical ensemble, participate in all phases of performance and production values. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 441 | Movement for Performance | Explores the relationship of movement as it relates to performance, both historically and cross-culturally. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 442 | Movement and Music | Surveys ways artists have brought together movement and music in artistic creations in various disciplinary and interdisciplinary contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 45 earned hours |
| IAP | 452 | Elements of Painting | Develops painting skills and personal artistic vision through projects stimulated by other art forms. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 454 | New Directions in Painting | Develops painting skills and personal artistic vision through projects stimulated by other art forms. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 457 | Urban Narrative | Conceptually based studio focusing on artists' voices in contemporary urban environment with readings on spatial perception and cultural objects. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 462 | Games and Play | Focuses on a study of play and game design. Discusses what play is and why humans need it as it pertains to game design. Scrutinizes the concept of what critical play is and how games are working within social, political and cultural systems. Studies these concepts as the students design and execute a serious or artistic game demo using the materials, processes, aesthetic concepts of art making and scripting skills needed to create a video game using a 3D game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: IAP 105 with C or better |
| IAP | 464 | Media and Diversity | Interdisciplinary art projects exploring identity, perception, and technologies from a basis of class, race, ethnicity, gender, sexuality, and ecology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 465 | Media Technologies and the Arts | Practical explorations of media arts interrelated with cultures, society, and technology, addressed through readings, discussion, research, and student arts projects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 466 | Digital Interactivity, Advanced | Advanced multimedia authoring skills for creation of interactive works in DVD, CD ROM, and other media formats. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 467 | Acoustic Ecology | Investigations into the relationship between audio art and ecology; covers field recording, oral histories, digital editing, and designing audio Web site and databases. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 468 | Digital Graphic Applications | Targeting, planning, design, authoring, development, and presentation of professional digital media graphics for Internet and print. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 469 | Advanced Audio Production | Engages advanced media students in the technical, logistical, and aesthetic concerns specific to audio in all forms of digital media. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 471 | Language, Culture, and Performance | In-depth examination of language in myth, poetry, social and aesthetic performance genres. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 472 | Theories of Arts and Performance | Key texts, thinkers, concepts, and approaches to the arts and performance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 473 | Aesthetic Research | Investigates how artists, in all disciplines and from different historical periods, conduct or participate in research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |

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| IAP | 474 | Art and Film | Focuses on film as an art form in relation to the arts through aesthetics, cinematic theory, period study. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 480 | Senior Project | Capstone course. Students develop an exit project for the IAP degree under the guidance of an advisor. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-6 | | |
| IAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 220 | Psychology, Multicultural Narratives, and Religion | Examines contemporary multicultural life narratives that explore diversity in America and the authors' constructions of psychological identity and religious values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 300 | Adult Career Development | Analysis of sociological and economic factors of 21st-century work environments, integrated with a psychological understanding of adult development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or SB | Pre-requisites: ENG 101 or 105 with C of better or Applied Science student |
| IAS | 305 | Work and Identity | Explores the relationship between work and identity, as well as the search for meaning in work across generations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| IAS | 310 | Women in Art | Cultural, historical, and social issues relating to the seeming scarcity of women artists and changing social contexts for women artists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: must have completed ENG 101 or 105 with a grade of C or greater, or be currently enrolled, or co-enrolled with IAS310. |
| IAS | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAS | 340 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-reqs for IAS 340. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |
| IAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 410, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |
| IAS | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better. Credit is allowed for only IAS 406 or PHI 406 |
| IAS | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| IAS | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| IAS | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| IAS | 410 | Evolution of Ideas | Investigates ideas (paradigms) and revolutions (paradigm shifts). Examines several topics from perspectives of science, arts, humanities, social sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |

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| IAS | 415 | Life in the Universe | Examines the search for life in extreme environments on Earth and in remote locations beyond Earth. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 416 | Black Holes and Beyond | Explores developments in understanding nature's most basic force-gravity-from Aristotelian concepts to modern theories of curved space-time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| IAS | 430 | Science and Religion | Examines evolving relationships between scientific thought and Western and Eastern religious thought. Explores cosmologies, worldviews, and epistemologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAS 430 or MAS 510 |
| IAS | 477 | World Literature | Introduces world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |
| IAS | 480 | Capstone: Practices and Approaches | Individualized projects developed by the student under the guidance of the capstone coordinator based upon the student's area of concentration. Provides an opportunity to apply the knowledge and skills developed in the course of their program to real-world situations. | N | RSC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): BA Integrative Studies or BA Religion and Applied Ethics or BAS Applied Science major |
| IAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| IBC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 602 | Healthcare Statistics | Provides an overview of contemporary issues in health statistics and develops student proficiency in completing hands-on statistical analyses using Microsoft Excel. Develops proficiency in using Excel to manage data analyses as an ongoing tool to collect and analyze clinical and cost-effectiveness data in primary care and related healthcare settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 604 | Clinical Medicine/Pathophysiology | Overview of each of the main systems within the human body. Addresses the major diseases (symptoms, diagnosis, and medical treatments) within each system. Students learn appropriate medical terminology for symptoms, diseases, treatments, and medical tests so they can communicate effectively with medical practitioners (nurses and physicians). Content is equivalent to pathophysiology training in an RN program. Also addresses the role of behavioral care providers in medical settings; design and implementation of psychoeducational programs in primary care; stress management techniques for use in medical settings; chronic pain management; identification and treatment of somatization disorder; increasing compliance in noncompliant patients; alternative/complementary medicine; overview of nutrition; and the effects of exercise and nutrition on prevention and treatment of diseases. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 608 | Psychopharmacology for the Behavioral Care Provider | Provides overview of psychopharmacology to equip the behavioral care provider with the understanding of psychotropic medications necessary to make prescription recommendations to primary care physicians and to participate in medication management for patients being prescribed psychotropics. Basic principles of pharmacology in general, including pharmacokinetics, pharmacodynamics, medication development and the FDA approval process, interaction effects, drug company marketing strategies, appropriate and inappropriate medication usage, over-the-counter medication use. Pharmacokinetics and pharmacodynamics in special populations (children, the elderly, and patients with comorbid medical and psychological conditions). The Biodyne protocol for medication management, with emphasis on determining which psychological disorders are likely to be medication responsive. Major classifications of psychotropic medications: stimulants, antidepressants, anxiolytics, antipsychotics, mood stabilizers, narcotics. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 609 | Clinical Neuropathophysiology | Presents overview of each of the basic neuroanatomy, neurophysiology, and a focus on the manifestations of neurophysiological dysfunction across the life span for Doctor of Behavioral Health (DBH) program behavioral clinicians. Covers the basic human brain anatomy, neurophysiological processes, development, and maturation. Using case studies, presents and discusses evidence-based support for theories of psychiatric disorders and neuropsychopathology. Incorporates evidence-based research findings on the role of genetics, neurophysiological adaptation, epidemiological and societal influences in order to develop understanding of disruptions in normal neurophysiological functioning. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 610 | Behavioral and Psychological Assessment in Primary Care | Presents a comprehensive model of behavioral and psychological assessment for behavioral health clinicians in primary care and related medical settings. Provides behavioral health consultants with the necessary knowledge base and skills to develop an appropriate assessment and treatment plan for a variety of commonly seen complaints in primary care. Places attention on the assessment of both psychiatric and behavioral complaints across the lifespan. Students become familiar with both structured interview and empirically support quantitative measures consistently utilized to enhance our understanding of the presenting complaint. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 612 | Introduction to Behavioral Interventions | Provides a foundational understanding of behavioral health interventions for primary care settings for those students intending to work in administrative, management or allied health positions. Provides a theoretical basis for various psychological schools of thought, as well as an overview of the empirical evidence for those approaches. Reviews models of therapy including: psychodynamic, brief strategic, cognitive-behavioral and solution-focused. Also reviews two intervention strategies typically used in integrated settings: Acceptance and Commitment Therapy (ACT) and Motivational Interviewing (MI). Explores the ways that these approaches serve as the theoretical framework of the Biodyne model. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 612 or IBC 780 (Introduction to Behavior Intervention) |
| IBC | 613 | Cognitive/Affective Bases of Health | Provides an overview of cognitive and affective theories and their intersection with health and health behavior change among individuals and communities. Covers topics including (but not limited to): Health Belief Model, self-efficacy, attribution theory, social-cognitive theory, and the transtheoretical model of change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 615 | Innovative Technologies in Behavioral Health | Provides a quick overview and answers to basic questions related to both online therapy and telemental health. Gives a downloadable audio recording (MP3) and access to the accompanying video clips that augment a rich sampling of pages extracted from our other coursework. As a composite, this experience introduces our multi-modal learning environment and, more importantly, gives an idea of the issues involved with establishing an online or otherwise remote practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 616 or IBC 780 (Innovative Technologies in Behav. Health Intervention) |
| IBC | 624 | Integrated Behavioral Health Care for Children and Adolescents | Integrates developmental psychology with pediatric psychology in order to prepare behavioral clinicians to provide screening, assessment, and intervention for children and adolescents in primary care and other medical settings. Presents an overview of developmental stages with an emphasis on critical tasks, while contrasting normal versus abnormal development. Develops societal, familial, and cultural influences. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 634 | Strategies and Techniques for Behavior Change in Primary Care | Examines and discusses the theoretical and applied health-related research changing nutrition, smoking and physical activity behaviors in clinical practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 660 | Healthcare Legal, Ethical, and Professional Issues | Integrate three key areas of healthcare ethics, law, and professional issues for the Doctor of Behavioral Health (DBH) clinician in primary care: (1) the code of ethics for psychologists; (2) legal and ethical issues in medicine; and (3) technological issues and the behavioral health provider. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IBC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 704 | Psychopathology & Personality in Integrated Primary Care | Covers the basic principles of the Biodyne Model, which are applicable to all behavioral health cases, both in outpatient mental health settings and in integrated care settings. Core knowledge forms the basis for success as a behavioral care provider in integrated medical settings. Includes common psychotherapist mistakes, evidence-based treatment, basics of the Biodyne Model, survey of integrated care approaches, defense mechanisms, case conceptualization strategies for maximum efficiency, and when to refer a patient for specialty care. Presents in detail common conditions (anxiety and depression), with a focus on how these conditions can be subcategorized for maximum treatment efficiency. Emphasizes the development of comprehensive treatment plans (including psychotropic medications, group programs, and other modalities). Presents didactic material in the context of actual cases. Strong focus on case examples, both illustrative cases provided by the instructor and the students' cases (past and/or current). | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 706 | Advanced Psychopathology & Personality in Integrated Primary Care | Focuses on a continuation of the Biodyne (Greek for "new life") model of brief, focused interventions across the lifespan developed by the renowned psychologist Dr. Nicholas A. Cummings and his daughter the psychologist Dr. Janet Cummings. Building on the previous semester, addresses the difficult problems of psychosis, suicide, substance abuse. In addition, focuses on the "garlic" patients who often require extensive system time and resources if not engaged with targeted, focused interventions in primary care. The emphasis of the Biodyne model is the appropriate utilization of selected interventions based on the Biodyne classification and intervention model rather than one-size-fits-all approaches to psychotherapy. Reviews models of integrated behavior healthcare with emphasis on implementation and delivery of behavior care services in the healthcare setting. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): IBC 704 |
| IBC | 708 | Evidence-Based Behavioral Intervention III | Covers advanced principles of evidence-based integrated behavioral care in primary care and other medical settings. Continuation and third course in the Evidence Based Behavioral Intervention I and II sequence. Further develops evidence-based approaches in the assessment and treatment of children and families and deepens and expands the skills in specific applications of assessment and treatment modalities for adults. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 712 | Population-Based Behavioral Health Management | Overview epidemiology for health care followed by population-based approaches to behavioral intervention. Epidemiology includes concept of populations; descriptions and definitions of health and disease, measurement of health (measures, morbidity, mortality and health); designs for studying the health of populations and standardization of population health measures. Population-based management includes definitions of medical management; planning health care for populations and population health outcomes; quality of care and economic analysis of population-based interventions; adjunctive treatments as a core component of population-based interventions. Also, advanced application of population-based behavioral interventions with a focus on design, measures, analysis, results and discussion of current approaches. Includes predictive modeling methods for defining populations; interventions focusing on stepped-care approaches; engagement strategies, interventions, measurement, and follow-up. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 714 | Quality and Performance Measurement, Improvement, and Incentives in Health Care | Overview of healthcare quality management, emerging models of healthcare performance measurement, and models of pay for performance incentives in healthcare designed to reward providers for attaining quality of care goals. Prepares behavioral clinicians to provide services that are consistent with best practices in quality management and performance measurement in healthcare and to provide care that is consistent with performance incentive programs that are present or on the horizon. A key characteristic of healthcare reform is increased focus on provider quality of care, accountability for quality via performance measurement, and aligning provider incentives to meet national and regional quality of care performance targets. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 718 | Healthcare Systems: Organization, Delivery and Economics | Provides an overview of the U.S. healthcare system with a focus on economics and policy. Primary goals of the course are to enable students to recognize the relevance of economics to healthcare and to apply economic principles to better understand health-related issues; understand the U.S. healthcare delivery system in the context of social, policy, and economic factors; evaluate the evolving nature of healthcare reform initiatives and their implications for clinical practice, financing, research and policy; analyze public healthcare policy from an economic perspective. Students also focus on behavioral healthcare economics and policy and the economics of behavioral health services in medical settings. Students also understand the medical cost offset effect, including economic benefits of behavioral interventions for co-morbid medical and behavioral conditions, measurement of medical cost-offset, and cost-offset for psychopharmacology and specific behavioral conditions. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 720 | Behavioral Health Entrepreneurship | Provides an introduction to the essential entrepreneurship skills for the behavioral healthcare clinician. Focuses on entrepreneurial skills designed to prepare the behavioral clinician to start a new business venture or revitalize an existing organization or business, to meet the needs of the evolving healthcare system and marketplace. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 728 | Cultural Diversity, Health and Illness | Focuses on the relationship among cultural diversity, health and illness, and multicultural psychotherapy in primary care and other healthcare settings. Prepares behavioral clinicians to identify the relationship between cultural diversity and health and illness and to use effective psychotherapy informed by cultural diversity in primary care and related medical settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IDN | 101 | Elementary Indonesian I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| IDN | 102 | Elementary Indonesian II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: IDN 101 with C or better |
| IDN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| IDN | 201 | Intermediate Indonesian I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 102 with C or better |
| IDN | 202 | Intermediate Indonesian II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 201 with C or better |
| IDN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| IDN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| IED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 401 | Navajo Language and Culture I | History and culture are added components to the introduction of language reading, writing, and speaking. Emphasizes basic communication and appreciation of history and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| IED | 403 | Navajo Language and Culture II | Emphasizes communication, grammar, and sentence structures. Translations, reading, writing, and discussions of proper and slang language. Includes cultural activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| IED | 410 | History American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Credit is allowed for only IED 410 or 510 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IED | 430 | Lang/Literacy-Indig Peoples | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Credit is allowed for only IED 430 or 530 |
| IED | 433 | Counseling the Indian Student | Techniques and methods used in counseling, with emphasis on understanding Indian cultures and values. Experimentation with new counseling concepts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| IED | 444 | Govt Role-Native Ed Pol/Adm | Examines the interrelationship of federal Indian policy, federal/state/tribal law, and tribal sovereignty as they have shaped American Indian education. Analyzes administrative practices and personnel, program and fiscal management, and resources as they reflect the historic and present influence of this triad of factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only IED 444 or 544 |
| IED | 460 | Yaqui History and Culture | Yaqui history and culture ranging from precontact to the present. Larger themes of Yaqui identity, belief systems, family, traditions, community, resistance, dispersion, and survival. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C & H | |
| IED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| IED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| IED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| IED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 510 | History of American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only IED 410 or 510 |
| IED | 530 | Language/Literacy-Indig People | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only IED 430 or 530 |
| IED | 544 | Govt Role-Native Ed Pol/Adm | Examines American Indian education and how it is impacted by the interrelationship of federal Indian policy, federal/state/tribal law, and tribal sovereignty. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only IED 444 or 544 |
| IED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| IED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |
| IEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 210 | Introduction to Industrial Engineering | History of IE: IE career paths; ethical, social, and contemporary issues; introduces IE techniques, methods, and their application; case studies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: IEE 100(or BME 100,CHE100,CEE100,CSE101, ECCE 100,EEE 101,EGR101,ISE 100,MAE 100,MSE 100, or SES 100) with C or better; MAT 265 (or MAT 270) with C or better |
| IEE | 220 | Business and Industrial Engineering | Introduces business for industrial engineers, including business/financial structures, fundamentals of cost and accounting, role of business/engineering in society. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: minimum 25 earned hours |
| IEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 300 | Economic Analysis for Engineers | Economic evaluation of alternatives for engineering decisions, emphasizing the time value of money. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAT 265 or 270 with C or better and Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: MAT 265 or 270 with C or better |
| IEE | 305 | Information Systems Engineering | Overview of computer and information systems applications. Topics include client/server, distributed computing, networks; process modeling, e-commerce, enterprise applications; Internet. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student and CSE 205 OR other majors with minimum 3.00 GPA and CSE 205 |
| IEE | 369 | Work Analysis and Design | Planning, analysis, and design of methods of accomplishing work. Emphasizes human factors, work planning, methods analysis and design, and work measurement. Applications in diverse fields. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student or Engineering Management Minor/Concentration; Pre- or corequisite(s): FIN 300 or IEE 300 |
| IEE | 376 | Operations Research Deterministic Techniques/Applications | Industrial systems applications with deterministic operations research techniques. Resource allocation, product mix, production, transportation, task assignment, networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): CSE 205 with C or better; MAT 242, 342 or 343 with C or better; or Industrial Engineering graduate student |
| IEE | 380 | Probability and Statistics for Engineering Problem Solving | Applications-oriented course with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate or Engineering Management minor; MAT 266 (or 271) with a C or better; or Industrial Engineering graduate student |
| IEE | 381 | Lean Six Sigma Methodology | Define, measure, analyze, improve and control (DMAIC) steps of six sigma methodology for business and quality improvement. Reviews the necessary statistical tools and illustrates their integration into the problem-solving process. Overview of lean principles and design for six sigma. Unique features of applying six sigma and DMAIC in transactional and service organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 380 with C or better; Credit is allowed for only IEE 381, 498 (Six Sigma Methodology) or 498 (Six Sigma Green Belt) |
| IEE | 382 | Probability and Statistics Lab | Applied modeling and data analysis using Excel and Minitab. | N | LAB | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Pre-requisites: Industrial Engineering or Engineering Management BSE student; Co-requisite: IEE 380 |
| IEE | 385 | Engineering Statistics: Probability | Conditional probability, common probability models, Goodness-of-Fit tests and reliability models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): undergraduate Fulton Engineering major or Engineering Management minor with IEE 380 with C or better OR graduate Industrial Engineering major |
| IEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 405 | Developing Information Systems Applications | Analysis and design of distributed information system applications using object and relational architectures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |

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| IEE | 412 | Introduction to Financial Engineering | Intensive exploration course of three phases: (1) a preparation phase for the terminology and financial lingo to be used throughout the semester, (2) introduction of more advanced financial topics such as portfolio formation, assessment and traditional portfolio theory, (3) several financial engineering topics such as the application of stochastic models to stock and derivatives pricing and financial risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): IEE 300 and 380 with C or better |
| IEE | 421 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisites: IEE 376 and 380 with C or better; Credit is allowed for only IEE 421, 498 (Urban Operations Research), 521 or 598 (Urban Operations Research) |
| IEE | 426 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisites: IEE 376 and 380 with C or better; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 431 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate, Digital Culture (Media Processing) BA, or Engineering Management minor or concentration; junior or senior standing. Credit is allowed for only IEE 431 or IEE 541 |
| IEE | 437 | Human Factors Engineering | Studies the human psychological and physiological factors that underlie the design of equipment and the interaction between people and machines. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student OR other majors with minimum 3.0 GPA; Credit is allowed for only IEE 437 or 547 |
| IEE | 454 | Risk Management | Methods and tools for identifying, assessing, mitigating and controlling risk in business and engineering design activities. Decision tools include cost-benefit analysis, decision trees, value of information, Bayesian statistical decision making, fault trees, and failure modes and effects analysis (FMEA). | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisites: ECN 221 or IEE 380 with C or better; Engineering major OR Engineering Management Minor/Concentration; Junior or Senior student |
| IEE | 456 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Junior or senior Engineering student OR Engineering Management Minor/Concentration; Credit is allowed for only IEE 456 or 556 |
| IEE | 458 | Project Management | Life-cycle processes for selecting and managing large-scale projects to ensure successful completion. Topics include project phases, defining milestones, work breakdown structure, group decision making and teamwork, organizational structure, human resource management, technological and economic feasibility, configuration management, budget control, and resource allocation and scheduling. Use of modern tools for planning and controlling project performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: ECN 221 or IEE 380 with C or better; Junior or senior Engineering OR Engineering Management Minor/Concentration student |
| IEE | 461 | Production Control | Techniques for the planning, control, and evaluation of production systems. Forecasting, inventory control, scheduling, enterprise requirements planning, supply chain design, and coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; IEE 376 with C or better; IEE 380 with C or better |
| IEE | 463 | Computer-Aided Manufacturing and Control | Computer control in manufacturing, CIM, NC, logic controllers, group technology, process planning, and robotics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | CS | Prerequisite(s): Engineering BS/BSE student; Junior or Senior standing; Credit is allowed for only IEE 463 or 543 |
| IEE | 470 | Stochastic Operations Research | Modeling and analysis with emphasis on stochastic operations research. Models for stochastic processes, including Markov chains, queueing and decision analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Industrial Engineering, Engineering Management or Computer Science undergraduate; IEE 376 and IEE 385 with C or better; or Industrial Engineering graduate; Credit is allowed for only IEE 470 or 598 (Stochastic Operations Research) |
| IEE | 474 | Quality Control | Basic statistical process control techniques, capability analysis, design of experiments, and acceptance sampling plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: IEE 380 with C or better |
| IEE | 475 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queueing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or other majors with minimum 3.00 GPA; CSE 205 and IEE 380 with C or better; Credit is allowed for only IEE 475 or IEE 545 |
| IEE | 477 | System Dynamics and Thinking | Methods for the modeling and analysis of system dynamics; metrics to measure business performance; continuous simulation tools for evaluation of system performance over time. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisites: CSE 205 with C or better; IEE 380 with C or better; Credit is allowed for only IEE 477 or 498 (System Dynamics Engineering) |
| IEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | |
| IEE | 485 | Systems Design Capstone I | Senior capstone project provides students with the skills required to effectively complete a capstone project in design and development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | L | Prerequisite(s): BSE Engineering Management major with pre-corequisite(s): IEE 475 (or IEE 477) OR BSE Industrial Engineering major with IEE 376 with C or better and pre- or corequisite(s): IEE 475 |
| IEE | 486 | Systems Design Capstone II | Project in design and development. Individual or team capstone project in creative design and synthesis. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | L | Pre-requisites: BSE Engineering Management or Industrial Engineering major; Senior standing; IEE 485 with C or better |
| IEE | 490 | Project in Design and Development | Individual or team capstone project in creative design and synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | L | Prerequisite(s): BSE Industrial Engineering major; IEE 376 with C or better and pre- or corequisite(s): IEE 475 OR BSE Engineering Management major; pre- or corequisite(s): IEE 475 |
| IEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-6 | | Prerequisite(s): Barrett Honors student |
| IEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-4 | | |

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| IEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-7 | | |
| IEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |
| IEE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 505 | Information Systems Engr | Studies information systems application engineering. Topics include information technology, data modeling, data organization, process mapping, application and database engineering, and user interface development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 506 | Web-Enabled Decision Support Systems | Development and analysis of Web-enabled applications for decision support. Topics include: (1) Web application development using ASP.NET; (2) design for computing scalability, interface usability and cyber security; and (3) use of application development skills and design concepts to develop a decision support system consisting of database, analytical data processing, expert knowledge and reasoning, and user-friendly interface for enabling transitions from data to information, knowledge and decisions. Knowledge of database development is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 506 or 598 (Design of Computational Systems) |
| IEE | 511 | Analysis of Decision Processes | Methods of making decisions in complex environments and statistical decision theory; effects of risk, uncertainty, and strategy on engineering and managerial decisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 498 (Analysis of Decision Processes) or 511 |
| IEE | 512 | Introduction to Financial Engineering | Introductory course on financial engineering covering traditional portfolio theory, forwards, futures, financial stochastic models, option pricing, and risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 520 | Statistical Learning for Data Mining | Surveys data analysis methods for massive data sets and provides experience in analysis with computer software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): IEE 572 (or IEE 578) |
| IEE | 521 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 421, 498 (Urban Operations Research), 521 or 598 (Urban Operations Research) |
| IEE | 526 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 530 | Enterprise Modeling | Focuses on social, economic, and technical models of the enterprise with emphasis on the management of technological resources. Includes organization, econometric, financial, and large-scale mathematical models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 533 | Scheduling | Provides the basic theory of scheduling and introduction to the applications domain. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 534 | Supply Chain Modeling/Analysis | Techniques for modeling and analysis of supply chains. Inventory management, transportation/location models, value of information, channel alignment, risk pooling, contracts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 574 with C or better |
| IEE | 535 | Intro Intrnl Logistics Systems | Exploratory project-oriented course that addresses domestic and international logistics practices from a high-level descriptive perspective and an analytical model-based perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 541 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only IEE 431 or 541 |
| IEE | 545 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queueing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 475 or 545 |
| IEE | 547 | Human Factors Engineering | Study of people at work: designing for human performance effectiveness and productivity. Considerations of human physiological and psychological factors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 437 or 547 |
| IEE | 552 | Strategic Technological Planning | Studies concepts of strategy, strategy formulation process, and strategic planning methodologies with emphasis on engineering design and manufacturing strategy, complemented with case studies. Presents and uses an analytical executive planning decision support system throughout course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 556 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. Graduate students are expected to have a background in and understanding of large-scale systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 456, 556 or 598 (Intro to Systems Engineering) |

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| IEE | 561 | Production Systems | Understanding how factories operate, how performance is measured, and how operational changes impact performance metrics. Operational philosophies, increasing production efficiency through quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 563 | Distributed Info Systems | Introduces concepts and technologies that form the core of distributed enterprise information systems. Topics include client-server architectures, distributed objects and paradigms, Internet, World Wide Web, distributed information sharing, network programming, and e-commerce and enterprise applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS/MSE/PHD student; IEE 505 with C or better |
| IEE | 564 | Planning -Cmpt-Integrated Mfg | Theory and use of IDEF methodology in planning for flexible manufacturing, robotics, and real-time control. Simulation concepts applied to computer-integrated manufacturing planning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 566 | Simulation in Manufacturing | Uses simulation in computer-integrated manufacturing with an emphasis on modeling material handling systems. Programming, declarative, and intelligence-based simulation environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; IEE 475 or 545 with C or better |
| IEE | 567 | Simulation System Analysis | Simulation modeling of processes involving discrete and continuous system components. Topics include random number generators, output analysis, variance reduction, and statistical issues related to simulation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; IEE 475 or 545 with C or better |
| IEE | 570 | Advanced Quality Control | Process monitoring with control charts (Shewhart, cusum, EWMA), feedback adjustment and engineering process control, process capability, autocorrelation, selected topics from current literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 571 | Quality Management | Total quality concepts, quality strategies, quality and competitive position, quality costs, vendor relations, the quality manual, and quality in the services. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 572 | Design Engineering Experiments | Analysis of variance and experimental design. Topics include strategy of experimentation, factorials, blocking and confounding, fractional factorials, response surfaces, nested and split-plot designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 573 | Reliability Engineering | Nature of reliability, time to failure densities, series/parallel/standby systems, complex system reliability, Bayesian reliability, and sequential reliability tests. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 574 | Appl Deterministic Oper Rsch | Develops advanced techniques in operations research for the solution of complex industrial systems problems. Goal programming, integer programming, heuristic methods, dynamic and nonlinear programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Industrial Engineering MS, MSE or PhD student |
| IEE | 575 | Appl Stochastic Oper Rsch Mdls | Formulate and solve industrial systems problems with stochastic components using analytical techniques. Convolution, continuous-time Markov chains, queues with batching, priorities, balking, open/closed queuing networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 576 | Analy Semiconductor Mfg Oper | Applies operations research and statistical methods to solve problems that involve semiconductor manufacturing operations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 577 | Adv Information System Oper | Industrial engineering knowledge and skills for information system operations, including aspects (security, quality of service, user interface, information modeling), problems, and solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; IEE 505 with C or better |
| IEE | 578 | Regression Analysis | Regression model building oriented toward engineers and physical scientists. Topics include linear regression, diagnostics, biased and robust fitting, nonlinear regression. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 579 | Time Series Analy/forecasting | Forecasting time series by regression-based, exponential smoothing, and ARIMA model techniques; uses digital computer programs to augment the theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 581 | Six Sigma Methodology | The six sigma process improvement strategy of define, measure, analyze, improve, and control (DMAIC). Integrates and deploys statistical methods and other six sigma problem solving via the DMAIC framework. Requires background in design of experiments, statistical quality control, and regression analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 582 | Response Surfaces/Process Opt | Classical response surface analysis and designs including steepest ascent, canonical analysis, and multiple responses. Other topics include process robustness studies, robust design, and mixture experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD; IEE 572 with C or better |
| IEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 585 | Six Sigma Capstone. | The DMAIC (define, measure, analyze, improve, control) improvement strategy is applied in the formulation and execution of a six sigma project. | N | PRA | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PhD student |
| IEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | Pre-requisite: Engineering Graduate student |
| IEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 605 | Foundations of Information Systems Engineering | Introduces science and engineering technologies of information systems design and analysis with focus on industrial engineering applications. Topics include: design and analysis of computational algorithms; and data mining techniques for classification, clustering, feature extraction and data reduction problems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Industrial Engineering Graduate student. Credit is allowed for only IEE 598 (Found Info Syst Eng) or 605 |
| IEE | 620 | Optimization I | First course of the PhD-level deterministic course series. Covers foundations of optimization and linear programming. Prior working knowledge of linear algebra and knowledge of how to formulate linear programs is required for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 622 | Optimization II | Introduces computational methods to solve optimization problems with integer variables and the mathematical theory behind them. Follows formulation of integer programming models with a survey of relaxation, decomposition and cutting-plane methods. Discusses various practical problems such as facility location, transportation and distribution problems. Assigns computational examples using the software IBM ILOG OPL. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 620; Credit is allowed for only IEE 622 or 598 (Optimization II) |
| IEE | 640 | Probability & Stochastic Processes | Presents fundamentals of probability and stochastic processes from a non-measure theoretic point-of-view to develop (a) basic model building and probabilistic reasoning skills, and (b) an understanding of important qualitative characteristics of some basic stochastic processes used to model dynamical systems with noise. Topics include a review of probability theory with particular attention to conditional probability and expectation; Markov chains; Renewal theory and the Poisson process. Considers applications in reliability, inventory theory, queueing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 470, Graduate Industrial Engineering major; Credit is allowed for only IEE 598 (Prob & Stoch Model) or 640 |
| IEE | 670 | Mathematical Statistics | Introduction to the field of mathematical statistics at a level intended for first-year PhD students in Industrial Engineering. Builds a solid background in the principles, concepts, and techniques of mathematical statistics. Prepares students for advanced study and research in statistics, and is useful for understanding statistical data analysis techniques and developing statistical thinking. Completion of at least one course in probability and statistics is required prior to taking this class. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 672 | Adv Topics-Experimental Design | Multilevel and mixed-level factorials and fractions, design optimality, incomplete blocks, unbalanced designs, random effects and variance components, analysis of covariance. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD student; IEE 572 with C or better |
| IEE | 677 | Regression/Genitdz Linear Mod | Theory of linear models including least squares, maximum likelihood, likelihood-based inference. Generalized linear models including Poisson and logistic regression, generalized estimating equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD student; IEE 578 with C or better |
| IEE | 679 | Time Series Analy/Control | Identification, estimation, diagnostic checking techniques for ARIMA models, transfer functions, multiple time series models for feedback and feedforward control schemes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD student; IEE 579 with C or better |
| IEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PhD student |
| IEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|---------------------------------------------------|-------|-----------------|----------------------------------------------------------------|
| IEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 100 | Introduction to Information Technology | Project-based introduction to the key concepts, tools and devices underlying today's technologies. Introduces computer hardware, software and system architecture, the Internet, the World Wide Web and information technology ethics. Forms a foundation for future courses offered in the Information Technology major and the information technology discipline. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | |
| IFT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-3 | | |
| IFT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 200 | Information Modeling, Storage and Retrieval | Notations, tools and languages for modeling, representing and manipulating information; database creation, access and management in the context of a controlling application. Analyzes information storage needs and design of an appropriate representation. Project-based access to information through tools and languages such as structured query language. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |
| IFT | 201 | Computer and Network Systems: Organization and Administration | Fundamentals of computer networks, computer organization and computer operating systems. Components, tools and languages for configuring and administering computer systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |
| IFT | 202 | Foundations of Information and Computer System Security | Project-based introduction to privacy, ethics, legal, social and professional responsibilities for information technology. Principles of information security and assurance and their implications on access. Tools and methods to identify intrusion, best security practices. Securing communications and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: IFT 201 |
| IFT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-5 | | |
| IFT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 301 | Introduction to Interactive Media | Human-computer interaction design for rich media systems. Introduces design processes, tools and principles for applications that are highly interactive with their users and which include multiple input/output modalities and multimedia. Project-driven course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 100 and 200 |
| IFT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 401 | Information Technology Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: Senior standing |
| IFT | 402 | Information Technology Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: IFT 401 |
| IFT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | |
| IFT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IFT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-7 | | |
| IFT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-3 | | |

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| IFT | 510 | Principles of Computer and Information Technology | Comprehensive introduction to computer and information technology (IT). Provides a detailed understanding of computer architecture, system software and important related issues in an IT context. Forms a technical foundation for understanding current technologies and how they work. Topics include principles of systems' physical architecture, operating systems and application software, storage and systems management as well as current developments in cloud computing, green IT, social networking systems, and Internet search. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 520 | Principles of Telecommunication Technology | Basic communication technology concepts from an information technology perspective. Addresses signals, spectra and bandwidth; attenuation, distortion and noise; filtering, equalizing, modulation and multiplexing; information measurement, source and channel coding, channel capacity, baseband data transmission, digital modulation and spread-spectrum systems; local area networks and architecture and performance; layered network architecture, protocols, switching techniques, TCP/IP, traffic engineering and basic capacity analysis. Focuses not on detailed component design but on understanding the interrelationships of these concepts and telecommunication systems to support broad system design and management. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 530 | Information Analysis, Modeling, Representation, and Communication | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 540 | Software Development for Information Technology | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 530 |
| IFT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| IMD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| IMD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| IMD | 564 | Multimedia Applications in Instruction | Utilizes various forms of multimedia and authoring software to create materials and instruction. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 566 | Assessment and Evaluation of Media Applications | Examines a variety of strategies in assessing learning, collecting and evaluating data, and evaluating technology resources for classroom integration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 572 | Media Collection and Development | Explores the identification, selection, acquisition, and evaluation of a collection of library resources for a specific community of users. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 574 | Organization and Administration of School Library Media | Explores the role of the school library media specialist and program as it relates to the educational community. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 120 | Drawing for Industrial Design | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for industrial design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major |
| IND | 121 | Principles for Industrial Design I | Industrial design as a language and process for creative thinking and realization. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major. Corequisite(s): IND 122 |
| IND | 122 | Principles for Industrial Design II | Continued exploration of industrial design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): IND 120 with C or better; Environmental Design or Industrial Design major. Corequisite(s): IND 121 |
| IND | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 227 | Visual Methods for Problem Solving | Introduces conceptual design activity based on the mind-eye-media feedback loop. Graphic language used to represent conjecture, analysis, synthesis of objects, and their contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 122 with C or better; Passed Milestone; Co-requisite: IND 260 |
| IND | 228 | Imaging and Visualization | Design activities stressing graphic language abstraction practiced for presentation. Discusses structure of criticism, including description, interpretation, and evaluation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 227 with C or better; Co-requisite: IND 261 |
| IND | 236 | Intro Cmpt Model-Indust Dsgn | Computers in industrial design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; Passed Milestone |
| IND | 242 | Materials and Design | Materials application in design. Introduces characteristics and properties of metals and organic materials, including plastics, and inorganic materials. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 243 | Design for Ecology and Social Equity | Explores the role of design in the ecological crisis; materials, processes, strategies and methods to design more ecologically friendly and socially equitable products. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 260 | Industrial Design I | Introduces the method and process of the industrial designer. Determinants necessary in small product design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 122 with C or better; Passed Milestone; Co-requisite: IND 227 |
| IND | 261 | Industrial Design II | Issues of physical form development related to product and design; form development properties of paper, fibers, wood, metal, and plastics. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 260 with C or better; Co-requisite: IND 228 |
| IND | 316 | 20th-Century Design I | Modern European and American design from 1900 to 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | |
| IND | 317 | 20th-Century Design II | Modern European, Asian, and American design since 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | |
| IND | 327 | Presentation Graphics | Studies methods for portfolio and professional product presentation using graphic media for information transfer. Stresses aesthetic judgment, organization, and craftsmanship. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Industrial Design student; Co-requisite: IND 360 |
| IND | 328 | Graphics for Industrial Design | Investigates and applies applications and planning to the development of an identity for a product line structured as a system. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 327 with C or better; Co-requisite: IND 361 |

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| IND | 344 | Human Factors in Design | Man-machine environment systems; human characteristics and behavior applied to design of products, systems, and their operating environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 354 | Principles of Product Design | Influences of physical and mechanical concepts in product design; mechanisms, kinematics, and fastening systems. Concepts of analysis for product design. Influences of concepts on aesthetics. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: PHY 111 with C or better, Digital Culture: Design, Industrial Design BSD, or Pre-Industrial Design major |
| IND | 360 | Industrial Design III | Methods of visual thinking, conceptualization, and ideation related to building skill levels in professional design presentation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 261 with C or better; Co-requisite: IND 327 |
| IND | 361 | Industrial Design IV | Emphasizes developing ideas into a complete functional product, including survey and application of aesthetics, human factors, materials, and manufacturing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 360 with C or better; Co-requisite: IND 328 |
| IND | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 460 | Design Project I | Complete analysis of the product unit as an element of mass production, featuring marketing, technology, human factors, and visual design. Emphasizes professional standards. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 361 with C or better; Co-requisite: IND 484; IND 470 |
| IND | 461 | Design Project II | Product design, with emphasis in systems interaction. Culmination of design process and technique. Encourages individual project direction. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design BSD student; IND 460 with C or better |
| IND | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Pre-requisites: Department approval; Application process; Credit is allowed for only IND, GRA or MGT 464 |
| IND | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | |
| IND | 470 | Professional Practice for Industrial Design | Business procedures, management techniques, accounting systems, ethics, and legal responsibilities of the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisite: Industrial Design student; Co-requisite: IND 460 or Design Studies minor student |
| IND | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Industrial Design student; IND 361 with C or better; Co-requisite: IND 460 |
| IND | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| IND | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IND | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 521 | Advanced Industrial Design Studio I | Design language, motivation and inspiration, form exploration sketching, rough form study mock-ups, form development, and presentation. Product redesign. Students create new design language proposals for an existing product and redesign the product based on one of these languages. Provides instruction and opportunities to understand product design language and how to redesign existing products with different design guidelines. Results include evidence of concept development (sketches, drawings, models); functional development; human factors and ergonomic considerations; materials and process specifications; sustainability recommendations; and appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Industrial Design major. Credit is allowed for only IND 521 or IND 590 (Advanced Industrial Design Studio I) |
| IND | 522 | Advanced Industrial Design Studio II | New product development with emphasis on design research, problem solving and functional/aesthetic development. Preliminary research about human behavior and health promotion. Based on the research findings, students conduct design research in teams and work on individual design projects. Student project results include evidence of concept development (sketches, drawings, models); functional development; human factors and ergonomic considerations; materials and process specifications; sustainability recommendations; and final appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion, and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 521. Corequisite(s): DSC 501. Credit is allowed for only IND 522 or IND 590 (Advanced Industrial Design Studio II) |
| IND | 544 | Human Factors Systems and Documentation | Advanced topics associated with theory and methods of human factors in design. Individual projects stressing problem organization, evaluation, and documentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| IND | 548 | Design for Sustainable Development | Research on designing systems that are economically viable, ecologically friendly, and socially equitable. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------|
| IND | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 622 | Advanced Industrial Design Studio IV | Challenges students to create new design concepts that improve society and the natural environment while also delighting users and creating value for business. Requires some independent direction by the student; however, instructor assigns deadlines and expectations for deliverables, and requires cooperation and collaboration among students. Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 621 |
| IND | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 111 | Interior Design Issues and Theories | Interiors issues, theories, and philosophies. Emphasizes unique social and cultural factors that shape 20th-century design concepts. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| INT | 120 | Design Drawing and Media | Visual thinking; Development of freehand drawing techniques as a language and tool to explore, communicate, and process ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Interior Design major |
| INT | 121 | Introduction to Computer Modeling for Interior Design | Computers in interior design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Credit is allowed for only INT 121 or 320 |
| INT | 123 | Introduction to Computer-Aided Design of Built Environments | Introduces AutoCAD computer-aided design principles and strategies for designers of the built environment. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 131 | Design and Human Behavior | Applies conceptual design to issues of programming and space planning, user needs, and behavior. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | SB | |
| INT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 221 | Principles of Design | Applied visual vocabulary: studio experience exploring applications, process and conceptual development of the principles of order and composition. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 120 with C or better; Environmental Design or Interior Design major. Corequisite(s): INT 222 |
| INT | 222 | Principles of Design Lecture | Applies the visual vocabulary: explores the principles of organization through examination of historical precedence and contemporary interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Environmental Design or Interior Design major. Corequisite(s): INT 221 |
| INT | 223 | Drafting for Interior Design | Orthographic, paraline, axonometric, and perspective projection; shades and shadows; and basic descriptive geometry for interior designers. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 261 |
| INT | 253 | Interior Materials, Finishes, and Specifications | Survey, evaluation, and specification of materials, finishes, and performance criteria for interiors. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |
| INT | 261 | Interior Design Studio I: Residential | Studio problems in interior design related to behavioral response in personal and small-group spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 223 |
| INT | 262 | Interior Design Studio II: Hospitality | Focuses on environments that entertain or host the public, including but not limited to nightclubs, restaurants, theaters, hotels, city and country clubs, golf facilities, cruise ships and conference facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |
| INT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 310 | History of Interior Design I | Evolution of interior design as an expression of cultural influences from the ancient periods to 1835. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: ARS 102 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| INT | 311 | History of Interior Design II | Evolution of interior design as an expression of cultural influences 1835 to present. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: INT 310 with C or better |
| INT | 320 | Computer Modeling for Design Studies | Computers in design management, including software concepts, specific packages, problem solving, illustration, modeling, and animation. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Credit is allowed for only INT 121 or 320 |
| INT | 341 | Interior Codes: Public Welfare and Safety | Codes and regulations as performance criteria for interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisite: Interior Design student; Co-Requisites: INT 253; INT 262 |
| INT | 351 | Ambient Environment | Surveys environmental control systems, acoustics, and lighting issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design major; PHY 101 with C or better. Co-requisites: INT 352, INT 362 and INT 381; OR Digital Culture: Design major |
| INT | 352 | Construction Methods in Interior Design | Design theory related to analysis, materials, and building techniques of horizontal and vertical construction in interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisites: INT 362; INT 381 |
| INT | 354 | Construction Documents | Elements of construction drawing sets, application of codes and specifications, and contract administration. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisite: INT 363 |
| INT | 362 | Interior Design Studio III: Hospitality and Retail | Investigates interior design issues in hospitality and retail environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; Co-requisites: INT 351, INT 352 and INT 381 |
| INT | 363 | Interior Design Studio IV | Explores the poetics of materials and their assemblage in the design of public and private spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 362 with C or better; Co-requisite: INT 354 |
| INT | 381 | Preinternship Seminar | Preparation of internship materials that produce and enhance a successful internship experience. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite: INT 262 |
| INT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 412 | History of Decorative Arts in Interiors | Design of decorative arts as an expression of cultural influences and as an extension of interior spaces. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Prerequisite(s): INT 311 with C or better. Credit is allowed for only INT 412 or INT 515 |
| INT | 413 | History of Textiles in Interior Design | Cultural and historical expression of textiles as related to interiors. | N | PRA | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 412 with C or better. Credit is allowed for only INT 413 or INT 516 |
| INT | 415 | Latin American Design | The impact of Latin American culture and civilization on design throughout the Americas. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Minimum Junior standing |
| INT | 446 | Furniture Design and Production | Design, construction, cost estimating, and installation in interior furniture and millwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design BSD, Interior Architecture BSD or Industrial Design BSD student |
| INT | 464 | Interior Design Studio V: Work Environments | Studio problems in interior design-related issues in work environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 363 with C or better; Co-requisites: INT 454; INT 471 |
| INT | 465 | Interior Design Studio VI: Institutional Design | Advanced interior design problem solving related to institutional facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 464 with C or better; Co-requisite: INT 472 |
| INT | 471 | Facilities Management | Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 472 | Professional Practice for Interior Design | Business procedures, project control, fee structures, and professional product liabilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Interior Design student; Co-requisite: INT 465 |
| INT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Interior Architecture BSD student; DSC 483 or INT 381 with Y grade |
| INT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| INT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| INT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 515 | Decorative Arts in Historic Interiors: A Thematic Overview | A thematic overview of decorative arts used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 412 or INT 515 |
| INT | 516 | Textiles in Historic Interiors: Appearance, Function, Symbolism | Overview of textiles used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 413 or INT 516 |
| INT | 522 | Advanced Interior Architecture Studio II | Investigates interior architecture issues, including construction, technology, programmatic and environmental determinants. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 521; Corequisite(s): INT 527; Credit is allowed for only INT 522 or INT 590 (Advanced Interior Architecture Studio II) |
| INT | 527 | Contemporary Design Theory | Aesthetic, political, economic, and social theories that have shaped modern design; theory as the basis for design philosophies. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 529 | Design Criticism | Applies critical methods to design as material culture and human expression; evaluates achievement versus intention. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| INT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 621 | Advanced Interior Architecture Studio III | Structured around the Design School traveling-studio model, based on design problems emphasizing the global context of interior architecture as it influences interior space and architectural form. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 522 |
| INT | 622 | Advanced Interior Architecture Studio IV | Individual, student-initiated capstone project reflecting a culminating synthesis of interior architecture ideas. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 621 |
| INT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| INT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 101 | Elementary Italian I | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 102 | Elementary Italian II | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 111 | Accelerated Elementary Italian | Accelerated elementary Italian for experienced language learners. Emphasizes reading, writing, listening, speaking, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| ITA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| ITA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 201 | Intermediate Italian I | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on both spoken and written genres of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 202 | Intermediate Italian II | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on values of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 311 | Italian Conversation | Engages students in different oral/aural activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 202 with C or better |
| ITA | 312 | Italian Composition | Engages students in different written activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & G | Pre-requisites: ITA 202 with C or better |
| ITA | 315 | Italian Civilization | Students read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 202 with C or better |
| ITA | 319 | Italian for Professions | Read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ITA 202 with C or better |
| ITA | 321 | Introduction to Italian Literature I | Studies the development of early Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 322 | Introduction to Italian Literature II | Studies the development of modern and contemporary Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 202 with C or better |
| ITA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 413 | Advanced Italian | Development and assessment of advanced spoken and written Italian proficiency through activities using all four skills. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 311 or 312 with C or better |
| ITA | 420 | Italian Cinema | Major trends of Italian cinema from the post-war period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 425 | Italian American Culture | Analyzes representations of Italian American history and culture in several media including literature, film, and television. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L | |

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| ITA | 430 | Italian Literature of the Middle Ages | Emphasizes Stii Novo, Dante's minor works, Petrarach, and Boccaccio. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 441 | Dante: Divina Commedia | Critical reading of the three Cantiche (Inferno, Purgatorio, and Paradiso). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 443 | Italian Literature of the Renaissance | Emphasizes Lorenzo de'Medici, Poliziano Castiglione, Machiavelli, Ariosto, and Tasso. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 446 | Italian Literature of the 18th and 19th Centuries | Goldoni, Parini, Alfieri, the poetry of Foscolo and Leopardi, and the sociohistorical novels of Foscolo, Manzoni, and Verga. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 449 | 20th-Century Italian Literature | Major works, figures, and movements of contemporary Italian literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ITA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ITA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ITA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ITA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 594 | Conf and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JAC | 101 | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |
| JAC | | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |
| JAC | | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |
| JAC | | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |

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| JHR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 501 | Proseminar in Social Justice and Human Rights | Classical and contemporary theories of social justice and human rights in the context of current local, national, and international issues. Special reference made to the roles of both governmental and nongovernmental organizations in addressing social justice and human rights issues. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 506 | Grant Writing for Social Justice and Human Rights | Seminar in grant writing and fund raising for social justice and human rights. Provide an introduction to the grassroots grant writing and fund raising process, with a particular focus on justice-oriented nonprofit and international nongovernmental organizations. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 510 | Problem-Based Seminar in Social Justice and Human Rights | Interdisciplinary seminar examines current problems in social justice and human rights from several different theoretical and analytical viewpoints. May be repeated once for credit. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 511 | Community-Embedded Seminar in Social Justice and Human Rights | Interdisciplinary seminar requiring students to be placed in community organizations dealing with the course issue during the semester. Emphasizes developing effective strategies for partnerships with relevant community organizations and evaluating institutional settings, policies, and procedures from the perspective of social justice and human rights. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 525 | Action Research in Social Justice and Human Rights | Advanced practicum in engaged, community-embedded research and interpretive analysis. Gives students experience in the practice of engaged fieldwork as well as the writing it generates. | N | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JMC | 101 | Grammar for Journalists | Grammar course specifically designed to help journalism majors master the essentials of grammar. All majors must achieve an 80 percent in the course, indicating a mastery of grammar, before they can move on to any other journalism courses. A test is offered during the first week of each semester's class so that students who feel they already have a mastery of grammar may attempt to test out. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication student |
| JMC | 105 | Freshman Seminar | Exploring the impact of technology on the profession of journalism during the last 20 years. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Credit is allowed for only JMC 105 or 194 (Freshman Seminar) |
| JMC | 110 | Principles and History of Journalism | Organization, function, and responsibilities of the media and adjunct services. Primary emphasis on newspapers, radio, television, and magazines. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Pre-requisites: Journalism & Mass Communication student; Credit is allowed for only JMC 110, MCO 110 or 120 |

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| JMC | 120 | Studio Production | Introduces the vocabulary of production. Develops familiarity with the studio equipment, its care and operation, and basic production procedures. Covers the ability to function as a member of a production team; sound attitudes toward assignments and constructive criticism; and an appreciation of production as a tool of the communication process. Discusses career opportunities in the diverse marketplace. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication major; Credit is allowed for only JMC 120 or 194 (Studio Production) |
| JMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisite: Journalism and Broadcasting student |
| JMC | 201 | News Reporting and Writing | Basic news reporting and writing techniques. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Pre-requisites: ENG 102, 105 or 107 and JMC 110 (or MCO 120) with C or better; JMC major; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists); Minimum 2.50 GPA |
| JMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| JMC | 301 | Intermediate Reporting and Writing (Print) | Intermediate news reporting and writing techniques. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): JMC student; Minimum 2.50 GPA; ENG 102, 105 or 108 with C or better; JMC 201 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School or JMC 101 or 194: Grammar for Journalists |
| JMC | 305 | Multimedia Journalism | Software and digital tools commonly used by multimedia journalists, including shooting and editing photos and video, social media, Web analytics, basic HTML, blogging, and design for the Web. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 201 with C or better; 2.5 cumulative GPA OR Graduate Mass Communication student |
| JMC | 310 | Public Relations | Theory and practice of publicity, public relations, and related techniques and procedures. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC student; Minimum 2.50 GPA; JMC 201 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School or JMC 101 or 194: Grammar for Journalists |
| JMC | 313 | Introduction to Editing | Copyediting and headline writing. Electronic editing on personal computer terminals. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 with C or better |
| JMC | 315 | Intermediate Reporting and Writing (Broadcast) | Intermediate broadcast news reporting and writing techniques with emphasis on audio. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 and ENG 102, 105 or 108 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists) |
| JMC | 320 | Newscast Producing | Principles of broadcast news producing, delivered via a combined lecture/lab experience and assignments based on editorial judgment, technical skills and industry awareness. Students emerge with strategies for total newsroom management, confidence in producing news content and newscasts under deadline pressure and prepared for a variety of producer-related roles in professional newsroom environments. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism major; minimum 2.50 GPA; JMC 315 with B or better |
| JMC | 325 | Multimedia Reporting | Gives students practical experience working in an online, multimedia environment. Helps sharpen skills and gives them a real-world view of how journalism works in the 21st century. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 and ENG 102, 105 or 108 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists) |
| JMC | 330 | Television Reporting | Writing, reporting and editing for television. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 315 and JMC 345 with C or better |
| JMC | 332 | Electronic Media Programming | Programming theory and evaluation, regulation, ethics, and responsibilities and basics of audience psychographics and effects. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 200 (or MCO 200) with C or better; Minimum 2.50 GPA |
| JMC | 336 | Station Operations | Basic understanding of the operations of a broadcast station. Examines internal organization structure and the relationship between each department. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 200 or MCO 200 with C or better |
| JMC | 345 | Videography | Develops an understanding of visual storytelling and how to craft a good, compelling story with pictures and sound. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists); Minimum 2.50 GPA; JMC 201 with C or better |
| JMC | 351 | Photojournalism I | Camera, lighting, and scanning skills. Discusses ethics. Emphasizes shooting pictures for newspaper assignments on deadline. A DSLR camera is recommended. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication students; JMC 201 with C or better; successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101); 2.50 cumulative GPA |
| JMC | 366 | Journalism Ethics and Diversity | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC student; JMC 110 with C or better; Minimum 2.50 GPA; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists) |
| JMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 300, JMC 315, TCM 300 or TCM 315 with C or better |
| JMC | 402 | Mass Communication Law | Provides a grounding in the laws and regulations that govern various aspects of the media with a focus on First Amendment guarantees and privileges and the extent to which those have been limited by courts and lawmakers. Topics include freedom of expression, libel, privacy and obscenity. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 201 and ENG 102 with C or better; Minimum 56 hours; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 194 Grammar for Journalists); Minimum 2.50 GPA |
| JMC | 410 | Turning Points in TV History | Uses historic television footage to talk about the evolution of news coverage and the ethical decisions journalists face. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 101 (or successful completion of English Grammar Exam); Credit is allowed for only JMC 410 or 494 (Turning Points in TV History) |
| JMC | 412 | Editorial Interpretation | The press as an influence on public opinion. Role of the editorial in analyzing and interpreting current events. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |

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| JMC | 413 | Advanced Editing | Theory and practice of newspaper editing, layout and design, picture and story selection. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 313 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 414 | Graphic Design for Print and Web | Theory, organization, and practice of layout, typography, and design in traditional and multimedia publishing. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC 305 with C or better |
| JMC | 415 | Writing for Public Relations | Development of specific writing techniques for the practitioner in public relations agencies and divisions of major organizations. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; JMC 270 or JMC 310 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 417 | Public Relations Campaigns | Theory, principles, and literature of public relations and how they relate to audiences, campaigns, and ethics. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC 415 with C or better; JMC 436 or 494 (Public Relations Research) with C or better; Minimum 2.50 GPA OR graduate Mass Communications major |
| JMC | 420 | Reporting Public Affairs | Instruction and assignments in reporting the courts, schools, government, city hall, social problems, and other areas involving public issues. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 301 with C or better; Minimum 2.5 GPA OR Graduate Mass Communication student |
| JMC | 430 | Sports Marketing and Campaigns | Creates a professional campaign engaging viewers and fans in new and meaningful ways solidifying Fox Sports Network's (FSN) position as a leader in sports programming. Students work within FSN's "Creative University" program to execute the campaign; FSN selects a campaign to implement. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC 101 (or successful completion of English Grammar Exam) and JMC 301 (or JMC 315); Journalism and Mass Communication major; minimum 2.50 GPA. Credit is allowed for only JMC 430 or JMC 494 (Sports Marketing and Campaigns) |
| JMC | 435 | Latino and Transnational Issues | Provides background and understanding of some of the most pressing and controversial issues of the day that are taking place in the Southwest borderlands. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 101 (or successful completion of English Grammar Exam); JMC 201. Credit is allowed for only JMC 435 or 494 (Latino and Transnational Issues) |
| JMC | 436 | Public Relations Research Methods | Understands the importance of research in communication strategy. Identifies different types of research and understands how they are used in public relations practice. Understands and critically evaluates published academic and professional research. Locates and uses secondary sources to help develop suitable research questions and support findings. Conducts research using both qualitative and quantitative methods. Analyzes data to reach robust conclusions, interprets findings and understands their implications within a specific communication context. Includes writing research reports. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 and 310 with C or better; Credit is allowed for only JMC 436 or 494 (Public Relations Research) |
| JMC | 437 | Documentary Production | Emphasizes individual production projects of the student's own conception and design utilizing studio, field, and postproduction techniques. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.5 GPA; JMC 345 with C or better OR Graduate Mass Communication student |
| JMC | 440 | Magazine Writing | Writing and marketing magazine articles for publication. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.5 GPA OR graduate Mass Communication student |
| JMC | 445 | Science and Medical Writing | Develops writing, reporting, and an understanding of key concepts in science as they relate to medical science research and practice. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 450 | Issues in Coverage of Business and the Economy | Explains the basics of business and economic journalism, the highest-visibility and most vital coverage in news today. Understands how companies and the economy operate, what red flags to watch out for, and the game plans of the many news outlets that cover business from print to broadcast to online. Equips students to include the financial aspects of stories they cover, removing the typical journalist "fear factor" associated with the use of numbers. Jumpstarts students' ability to have a career in business journalism. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 201 with C or better; Credit is allowed for only JMC 450 or 494 (Issues in Coverage Bus/Economy) |
| JMC | 451 | Photojournalism II | Emphasizes shooting and Photoshop skills for newspaper and magazine assignments. Film and digital photography, flash and studio lighting. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 305 with C or better; JMC 351 with C or better; Minimum 2.5 GPA; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101) |
| JMC | 452 | Photojournalism III | Continued practice in shooting (film and digital) and Photoshop skills for newspapers and magazines. Emphasizes single images, picture stories, editorial illustrations, and portfolio development. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 451 with C or better OR Graduate Mass Communication student |
| JMC | 453 | Reporting on Business and the Economy | Trains in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 (or 315) and JMC 450 with C or better; Credit is allowed for only JMC 453 or 494 (Reporting on Business/Economy) |
| JMC | 455 | Digital Media Entrepreneurship | Covers the experience of identifying a marketable idea and transforming it into a product and a company. Covers concepts of entrepreneurship including the fast-paced--and ambiguous, sometimes chaotic--kinds of "scalable" enterprises often associated with Silicon Valley. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 305; Credit is allowed for only JMC 455, 494 (Digital Media Entrepreneurship), MCO 555 or 598 (Digital Media Entrepreneurship) |
| JMC | 460 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an award-winning online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 305 with C or better; Minimum 2.50 GPA or Graduate Mass Communication student |
| JMC | 465 | Precision Journalism | Advanced reporting methods using Internet research and data analysis tools for beat and investigative stories. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 or 315 with C or better; Minimum 2.50 GPA or Graduate Mass Communication student |
| JMC | 470 | Depth Reporting | Introduces strategies for writing in-depth newspaper or magazine articles. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |

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| JMC | 472 | Media Management | Management principles and practices, including organization, procedures, policies, personnel problems, and financial aspects of station management. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; MCO 200 (or JMC 200) with C or better; Minimum 2.50 GPA OR Graduate Mass Comm student |
| JMC | 473 | The Business and Future of Journalism | Exposes advanced journalism students to broad media management problems; helps students understand how essential the bottom-line and quality journalism are to the entire journalistic enterprise; helps students think about how to balance those two concerns. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism student; minimum cumulative GPA of 2.5; JMC 201 with C or better |
| JMC | 475 | Television Newscast Production | Writing, reporting, and production of the television newscast. May be repeated once for credit. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Pre-requisites: Journalism and Mass Communication student ; JMC 330 with C or better or currently enrolled; 2.50 cumulative GPA OR Graduate Mass Communication student |
| JMC | 476 | Public Relations Laboratory | Synthesizes and applies the theories, principles and techniques of public relations. This body of knowledge includes research, planning techniques, types of budgets, organizational systems, management styles, campaign components, types of campaigns, technology, ethics, diverse channels of communication and target audiences. Students: (1) analyze, discuss, then respond to public relations case studies; (2) develop an in-depth understanding of a client's needs; (3) conduct primary and secondary research; (4) work with a client in a team-based approach to prepare a comprehensive campaign proposal to address the client's problem or issue; (5) design and develop media products for client; (6) formally present the proposal to the client and the class. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 415 and 436 with C or better; Credit is allowed for only JMC 476 or 498 (Public Relations Lab) |
| JMC | 477 | Innovation and Entrepreneurship Lab | Research and development program designed to help media companies create new and exciting multimedia products and to help students create digital media startups. Brings together students from disciplines across campus, including journalism, business, computer engineering and design. Journalism students conduct research into developing new products and creating prototypes for those products. Students learn by doing, interacting with clients or investors, the director and the lead Web developer. Students schedule meeting times with the director to discuss projects. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; Credit is allowed for only JMC 477 or 498 (Innovation Entrepreneurship Lab) |
| JMC | 478 | Cronkite News Service | Supervising editorial content of the television newscast. Focuses on writing, use of graphics, and video. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Pre-requisites: JMC student; JMC 301 or JMC 315 with C or better |
| JMC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | |
| JMC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| JMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisites: JMC student; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | Pre-requisites: JMC student; Minimum 2.25 GPA; Successful completion of English proficiency exam OR Graduate Mass Communication student |
| JMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-3 | | |
| JMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 101 | First-Year Japanese I | Basic speaking, listening, reading, writing, computer skills, and culture. Hiragana, katakana, 75 kanji. For students without previous Japanese instruction. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| JPN | 102 | First-Year Japanese II | Continued development of JPN 101 skills. 99 additional kanji. Communication skills goal: ACTFL Guideline Novice-Mid to Novice-High. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 101 with a C or greater or in progress. Students may not take JPN 102 if they have received credit for JPN 201, 202, 309, 310, 311, 312, 313, 314 or 321 |
| JPN | 115 | Japanese Popular Culture: Anime, Manga, and Film | Examines different media of Japanese popular culture such as comics (manga), animation (anime) and film for evidence of how the Japanese express their self identity in Japanese society. By separating the media into themes such as technology and the future, war/apocalypse/disaster, violence in society, gender and sexuality, and human relations, understands the Japanese culture (and social consciousness) more intimately. Students view films, read scholarly articles on the subject matter, and actively participate in the course through written papers and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Credit is allowed for only JPN 115 or 194 (Japanese Popular Culture: Anime, Manga, and Film) |
| JPN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |

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| JPN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 201 | Second-Year Japanese I | Continued development in speaking, listening, reading, writing, culture, and computer skills. 74 additional kanji. Introduction to kanji dictionary. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 102 with C or better; Students with credit for JPN 202, 309, 310, 311, 312, 313, 314 or 321 may not enroll in JPN 201 |
| JPN | 202 | Second-Year Japanese II | Continued development of JPN 201 skills. 116 additional kanji. Communication skills goal: ACTFL Guideline Intermediate-Low to Intermediate-Mid. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: JPN 201 with C or better |
| JPN | 206 | Japanese Calligraphy | Introduces Japanese calligraphy using traditional implements, starting with basic brush strokes and stroke order for kanji and kana. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Pre-requisites: JPN 101 with C or better |
| JPN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 301 | Third-Year Japanese I | Development of reading skills, using authentic materials to comprehend structure, grammar, idioms, and culture. Expansion of kanji and vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: JPN 202 with C or better |
| JPN | 302 | Third-Year Japanese II | Continued development of reading skills, as in JPN 301. Reading proficiency goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 301 with C or better |
| JPN | 309 | Japanese Oral Communication I | Development of interpersonal, interpretive, and presentational oral/aural skills in familiar topics with sociolinguistic skills and understanding of Japanese culture. JPN 309 and 310 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 202 with C or better |
| JPN | 310 | Japanese Oral Communication II | Continued development of oral/aural skills, with increased emphasis on honorifics. Speaking proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 309 with C or better |
| JPN | 311 | Japanese Composition I | Learning structural guidelines for narrative writing, developing organization skills to support ideas. Writing proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 202 with C or better |
| JPN | 312 | Japanese Composition II | Continued development of writing skills, introducing research and creative writing. Writing proficiency goal: ACTFL Guideline Intermediate-high to Advanced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 311 with C or better |
| JPN | 315 | The Language of Japanese Popular Culture I: Gender and Onomatopoeia/Mimesis | Develops reading and listening skills using Japanese popular culture materials of various genres, including narratives, comics, anime, film and music. Introduces linguistic elements that are not found in regular language textbooks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre- or corequisite(s): JPN 202 with C or better if completed; Credit is allowed for only JPN 315 or JPN 394 (The Language of Japanese Popular Culture I) |
| JPN | 316 | The Language of Japanese Popular Culture II: Honorifics and Dialects | Understands Japanese popular culture materials such as anime, music, movies, manga and narratives through their target language of Japanese. Emphasized language areas are honorifics, formal expressions, dialects and slang and vulgar expressions that are tolerable in the classroom environment. Introduces elements of the history, geography and culture of Japan to further students' understanding of the materials. Students improve their receptive skills, i.e., listening and reading, by engaging with these materials, and through the technique of shadowing, also improve their pronunciation, intonation and grammatical accuracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre- or corequisite(s): JPN 301 with C or better if completed; Credit is allowed for only JPN 316 or JPN 394 (The Language of Japanese Popular Culture II) |
| JPN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 401 | Reading Modern Japanese Texts I | Readings in modern literary and expository texts. Focus varies from year to year. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: JPN 302 and SLC 202 with C+ or better |
| JPN | 414 | Introduction to Classical Japanese | Readings from various genres of pre-20th-century literature, with analysis of the structure of the classical language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 302 with C or better |
| JPN | 415 | Advanced Classical Japanese | Close readings of selected premodern texts, with focus on grammatical and stylistic features. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 414 with C or better |
| JPN | 445 | Readings in Modern Japanese Letters and Culture | Advanced study of selected facets of modern Japanese letters and culture, including literature, material and visual culture, film, and other media. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 202 with C or better. Credit is allowed for only JPN 445 or 535 |
| JPN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| JPN | 485 | Literary Translation: Theory and Practice | Introduces theories and practice of literary translation, with an emphasis on the translation of Japanese literary texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 421 with C or better. Credit is allowed for only JPN 485 or 585 |
| JPN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| JPN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JPN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |

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| JPN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| JPN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 535 | Advanced Readings | Readings in primary and secondary sources in history, art, religious studies, literature, or other fields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 445 or 535 |
| JPN | 543 | Japanese Language and Linguistics | Analysis and discussion of linguistic theories applied to Japanese phonology, morphology, and syntax, including psychological, sociological, and historical aspects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 585 | Advanced Problems of Translation | Theories and practice of translation; strategies for handling a variety of Japanese texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 485 or 585 |
| JPN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JST | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| JST | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| JST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Credit is allowed for only JST 210 or REL 210 |

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| JST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| JST | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| JST | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| JST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JST | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| JST | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| JST | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 317 |
| JST | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| JST | 373 | Women in Judaism | Studies the legal, social and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better and minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| JST | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| JST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST or REL 396 |
| JST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| JST | 491 | History of Anti-Semitism | Anti-Semitism means hostility, negative perceptions, and persecution of Jews. Examines the evolution of anti-Semitism in the West from antiquity to modern times. Explains the history of anti-Semitism by looking at the interplay of religious, economic, cultural, and political factors. Special attention given to the origins of Christianity, the place of Judaism in Christian self-understanding, the power struggle between popes and emperors during the Middle Ages, the involvement of Jews in money lending, the alliance between the Jews and the secular princes, the rise of modern nationalism, and the place of racism in the politics of modern nation states. With a better understanding of the history of anti-Semitism, ponders the differences and similarities between premodern anti-Judaism and modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 230 (or REL 210) with C or better |
| JST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| JST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 495 | Judaism, Science and World Religions | Studies the correlation between science and religion as an interdisciplinary study from a historical perspective. Session topics fall into three distinct units. The first correlates the physical sciences with Western religious theology; the second explores the consequences of the life sciences on religious psychology; and the third examines the impact of the interconnection between sciences and religions in society. Each unit is studied through specific readings, film, lectures, and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 496 | Biblical Narratives: Literary Approaches | Presents different trends in synchronic approaches applied to the Bible such as narrative criticism, semiotics, reader-response criticism, and situates them both in the postmodern cultural context and in the history of biblical exegesis. Explores various literary devices in biblical narratives, such as repetition, type-scenes, characterization, the change of points of view, the use of metaphors. Studies each technique on particular biblical texts, literally translated into English, with a special emphasis on how these techniques guide the interpretation and create meaning. Questions the significance of literary approaches for religious or ideological texts, such as the Hebrew Bible. Also considers criticisms raised against these approaches, assesses their limits, and envisions their future. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108 with C or better; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |
| JST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JST | | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JUS | 105 | Introduction to Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for freshmen and sophomores. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 105 or 305 |
| JUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must have less than or equal to 25 earned hours |
| JUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: Must have less than or equal to 25 hours |
| JUS | 200 | Topics in Concepts and Issues of Justice | Uses critical thinking skills to analyze and comprehend controversial social issues (e.g., abortion, affirmative action, capital punishment, the flat tax, and immigration). | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 207 | Homicide and Serial Killers | Explores the scholarship, research and rational analysis of the mass, spree and serial killer. It will examine some of the causes and underpinnings of these killers within the U.S. as well as the major theories and understandings of this phenomenon. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| JUS | 214 | Justice Institutions | Introduces a wide variety of institutions and organizations--locally, nationally and internationally--that seek justice. Provides an understanding of the many ways justice is institutionalized in modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |
| JUS | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| JUS | 222 | Drugs and Justice | Provides an historical overview of the development and circulation of certain drugs; explores the more specific effects of drug use and abuse in everyday life; and examines the efforts by governments to both restrict/end and facilitate/expand the drug trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 200 (Drugs and Justice) or 222 |
| JUS | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |

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| JUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| JUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 300 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| JUS | 301 | Research in Justice Studies | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Stresses methods for conducting research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 302 | Statistical Analysis for Justice Studies | Concepts and application of descriptive and inferential statistics, including linear regression, for justice studies research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | CS | Prerequisite(s): minimum 2.00 cumulative GPA; minimum 24 hours; ENG 102, 105 or 108 with C or better; MAT 117, 142, 170 or approved MA General Studies course |
| JUS | 303 | Justice Theory | Examines classic and contemporary philosophies and theories of justice, including legal, social, and criminal justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA |
| JUS | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present; looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |
| JUS | 305 | Principles of Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for juniors and seniors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 105 or 305 |
| JUS | 308 | Courts and Society | History and development of courts. Relationship between dispute resolution mechanisms and cultural/social structure/processes in which they are embedded. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 320 | Community and Social Justice | Discusses and analyzes definitions of community; impact of environment on behavior; promises of community organization for local empowerment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 321 | Wealth Distribution and Poverty | Examines wealth and income distribution in the United States and analyzes ideological and political forces producing an increasingly unequal society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 323 | Justice and the Development of the Welfare State | Provides a comprehensive overview of the development of social welfare and relevant issues pertaining to social justice. Introduces upper-division students to different ideas about the meaning of social welfare in the context of the development of the U.S. welfare state. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA; Credit is allowed for only JUS 325 or SGS 325 |
| JUS | 326 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| JUS | 329 | Domestic Violence | Critical inquiry into the legal, historical, theoretical, comparative, and treatment literatures on domestic violence; application of contemporary justice and social change theories to research how society defines and organizes against domestic violence. May include consideration of intimate partner abuse, child abuse and neglect, and gender violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| JUS | 332 | Politics of Energy Policy and Justice | Examines the social and political dimensions that shape energy and environmental policy. Focuses primarily on the U.S. Introduces elements of regional or global policy where they influence or shape domestic politics and policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 335 | Organized Crime | Critical inquiry into organized crime and its illegal activities; analysis and application of contemporary theories; analysis of strategies for reducing the prevalence and power of organized crime in the U.S. and other nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |

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| JUS | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| JUS | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| JUS | 350 | Immigration and Justice | Examines immigration policy, history of immigration, refugee issues, labor force participation, gender, family, children, social networks, and transnationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 352 | The Global Politics of Human Rights | Examines political forces that have shaped gradual construction of an international human rights regime and a universal culture of rights, including civil and political rights, as well as economic, social, and cultural rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| JUS | 360 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 365 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| JUS | 370 | Cultural Diversity and Justice | Analyzes how cultural diversity challenges and broadens conventional understanding of justice. Examines how cultural beliefs and practices come into conflicts with public law and policy. Assesses the U.S.'s performance on incorporating cultural diversity in its social institutions including education, media, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: 2.00 cumulative GPA; Pre/Co-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours |
| JUS | 374 | The Holocaust, Genocide, and Human Rights | Explores the psychological, social, historical, and political dimensions of the Holocaust and the phenomenon of genocide. Also examines the more recent international cases of genocide along with a discussion and analysis of the Universal Declaration of Human Rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 375 | Justice and the Mass Media | Analysis of the impact of mass media and popular culture on social justice issues, including criminal justice. Critical inquiry into portrayals of gender, race, culture and class in mass media and other forms of popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 382 | Justice and Pop Culture | Explores the connections between the production, reproduction, and consumption of popular culture and the resultant impact on issues of justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 385 | Justice and Everyday Life | Justice and injustice in everyday life and how small things can become legal issues. Role of language and interaction in social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 2.00 GPA; Minimum 24 hours |
| JUS | 405 | Economic Justice | Addresses economic issues and justice implications, including the interplay among economic conditions, race-ethnicity, class, and gender worldwide. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 408 | Comparative Development of the Welfare State | Embodies a multidisciplinary perspective on welfare issues and exposes students to different ideas about justice beyond the United States. Allows them to better understand how and why states organize and deliver justice in different ways. Exposes students to cross-national variation in how history, culture, politics, and economics have shaped the development and content of different types of welfare states. Engages theoretical perspectives from political sociology and political economy concerning the emergence and future fate of these welfare states. Analyzes comparative analysis of three distinctive types of welfare states: Liberal, Conservative, and Social Democratic Welfare States, with particular emphasis on their varying capacity to combine economic efficiency with social justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 410 | Punishment: Logic and Approach | Analyzes forms of punishment, how and why they have changed. Areas include philosophy, history, and social structure of punishment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

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| JUS | 414 | Black Political Movements: Pan Africanism to Black Power | In-depth examination of the three defining 20th century political movements in Africa and the African Diaspora (USA, Europe, Latin America and the Caribbean)the Pan Africanist, the Civil Rights and the Black Power movements. A primary course objective is to synthesize a comprehensive understanding of Black/African politics and society from a Diasporan perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 9 upper-division hours; junior standing; Credit is allowed for only AFR 394 (Black Political Movements) or AFR 414 or JUS 414 |
| JUS | 415 | Gender and International Development | Examines the ways in which international development is gendered as well as women's rights as human rights in both national and international arenas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 420 | Women, Work, and Justice | Examines gender inequality in the workplace, including the nature of women's work, theoretical issues, and models for promoting gender justice at work. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 421 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |
| JUS | 422 | Women, Law, and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 422 or WST 422 |
| JUS | 424 | Ethics and Alternative Tourism | Cultural processes related to alternative tourism and their impact on both the tourist and local. Travel, tourism, globalization, development, human rights and the commodification of people and places. Topics include issues pertaining to Western tourism, commodification, race/class/gender and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 36 hours. Credit is allowed for only JUS 424 or JUS 494 (Sex, Drugs and Death) |
| JUS | 425 | Race, Gender, and Justice | Critically examines major theories, research findings, policies, and controversies concerning race, ethnicity, gender, and crime. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 427 | Identity and Justice | Theory of symbolic interaction which provides a vocabulary, observational methodology (i.e., dramaturgy) and a set of grounding concepts that allow students to explore identity in its everyday practices. Explores the transformation and emergence of identities in public discursive spaces and the political impact of identity as it is deployed (invoked) and interpreted (imputed) among interactants in the social world. Establishes the position that identity operates as a central constitutive function in the construction of meaning and, subsequently, our ideas and attitudes about justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only JUS 427 or JUS 494 (Identity & Justice) |
| JUS | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| JUS | 430 | Social Protest, Conflict, and Change | Analyzes historical and contemporary protest movements advocating equality based on race, gender, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 432 | Racial Justice | Racial inequality remains a dominant theme in understanding social, legal, and economic justice in the U.S. today. Explores controversial topics surrounding race and justice. Emphasizes current legal, economic, political, and social conceptual frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 435 | Cinema and Justice | Tracks the conceptualizations of justice that have been and are currently conveyed in film, including but not limited to the relationship between crime and various notions of justice. Other depictions include social issues such as gender, race, or economics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 438 | Human Differences: Dilemmas of Justice | General examination of democracy and human differences that expands into in-depth investigations of (1) racial difference and identity politics; (2) gender and sexual difference in democracy; and (3) cultural difference and the multiculturalism debate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 444 | Environment and Justice | Explores issues of environment and justice. Topics include justice and environmental racism, future generations, nonhuman life, global/non-Western societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 445 | Surveillance and Society | Explore how surveillance technologies alter social life, the complex ways that they interact to produce security, fear, control, and/or vulnerability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 450 | Alternatives to Incarceration | Investigates various alternatives to incarceration; advantages/disadvantages; major issues including net widening, cost effectiveness, risk assessment, community crime prevention. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 452 | Justice Issues in Israel and Palestine: The Political is Personal | Explores the justice issues related to the symbolic, historical, geographic, political, economic, religious, social and cultural meanings of Israel and Palestine. Focuses on how and why the "political" is felt so very personally in everyday life in Israel and Palestine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 460 | Feminism and Justice | Explores feminist thought and critiques traditional political theories. Examines issues of racism, sexuality, and the law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 463 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 465 | Death Penalty in the United States | Focuses on capital punishment in the United States; explores negotiation of law, politics, morality, public policy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| JUS | 467 | Terrorism, War, and Justice | Examines the relationship among terrorism, war, and justice. Analyzes terrorism within the larger study of deviance and social control, comparative politics, hegemony, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 468 | Protest, Justice, Law and the Media | Examines research on protests, political deviance, trials/law and justice, and critiques some of the media representations of related ideas. Investigates global social movements, political protests and nascent political trials. Analyzes varied justifications for defining action as diversity, deviance or crime and the reasons for using criminal, civil or alternative (positive) sanctions (especially via indigenous peoples). Explores the encompassing meaning of a political trial. Many people throughout the world find everyday life to be a trial, especially those placed on the margins of globalization. Expands the research on media and trials that usually have been examined narrowly by legal institutions in North America and reinforced by hegemony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 2.00 GPA; minimum 36 hours; Credit is allowed for only JUS 468 or 494 (Protest, Justice and the Media) |
| JUS | 469 | Political Deviance and the Law | Examines the controversies created by political and deviant behavior, including a critical view of law as an agent of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 470 | Alternative Dispute Resolution | Critical examination of the tenets of alternative dispute resolution movement; exposure to the programs of ADR, including community and court based. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Non-Justice Studies majors with minimum 56 hours and 2.50 GPA OR Prof/capstone undergrad or Justice Studies graduate; Credit is allowed for only REL 482, POS 473, or JUS 473 |
| JUS | 474 | Legislation of Morality | Addresses historical and contemporary issues related to social justice movements, law, and morality in a pluralistic society. Issues include AIDS, burial rights, homosexuality, poverty, prostitution, and racial discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 477 | Youth and Justice | Critical examination of youth-related justice issues, including economic justice, violence against youth, delinquency, and the juvenile justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 479 | Law and Disputing | Critical analysis of the controversies created by disputes, law, and other forms of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| JUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| JUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| JUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Social and Cultural Pedagogy MA student, Justice Studies MS or PHD student |
| JUS | 501 | Justice Theory | Theories and philosophies of social, economic, political, and criminal justice. Applies theories to contemporary justice issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 503 | Crime and Social Causation | Theories of deviance and crime as they relate to social policies and specific response of the justice complex. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 509 | Statistical Problems in Justice Research | Methodological problems of research design and statistical methods specific to justice studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 521 | Qualitative Data Analysis and Evaluation | Analyzes qualitative data, e.g., field notes, in-depth interview transcripts, document analysis, coding, and retrieval with a microcomputer; qualitative evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 542 | American Indian Justice | Provides a broad overview of American Indian and Alaskan Native issues of justice and injustice in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 550 | Gender, Race, and Economic Justice | Provides a critical social scientific perspective on economic issues particularly as they relate to gender, race, and class equality. Examines issues of economic inequalities as they are distributed along the lines of gender and race. Components converge to identify the social justice ramifications of economic policy and economic conditions. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 555 | Migration/Immigration and Justice | Explores the causes and consequences of immigration to the United States and the incorporation of immigrants into the American economy and society. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 560 | Women, Law, and Social Control | Gender issues in the exercise of formal and informal mechanisms of social control, including economic, social, legal factors, both violent and nonviolent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JUS | 570 | Juvenile Delinquency | Study of delinquency, including causation theories. Alternative definitions of delinquency, official statistics, and the critique and analysis of the interaction between social institutions and youth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 575 | Race, Gender, and the Law | Explores the law and social sciences literature on race, ethnicity, gender, and the legal order. Critically assesses the major contemporary theoretical and policy debates and controversies in the field from a variety of disciplinary and interdisciplinary lenses, setting these debates in their historical contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 579 | Political Deviance | Seminar examines the politics of deviance by integrating the study of conflict with aspects of social organization, especially state formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 588 | Justice and the Mass Media | Analyzes the nature and impact of mass media messages about justice concerns for social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 610 | Law and the Social Sciences | Analyzes the theoretical grounds underlying diverse studies of law and society; creation and administration of law; and jurisprudence and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 620 | Justice Research Methodology | Covers the epistemology of knowledge and method in justice research, history, and philosophy of social science and critical inquiry, as well as perspectives that link these concerns to research strategies. Explores the strengths and weaknesses of introduced methodologies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 500 with C or better |
| JUS | 630 | Data Analysis for Justice Research | Bivariate and multivariate techniques of data analysis and hypothesis testing for justice-related research and use of information and statistical programs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 509 with C or better |
| JUS | 633 | Community Research | Focuses on epistemology, methodology, and the production of knowledge about community and seeks to link theory, methodology, specific research strategies, and social criticism about the conduct of community research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 640 | Theoretical Perspectives on Justice | Analyzes philosophical perspectives of justice; linkages between social science theory and justice constructs; application of justice to social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 501 with C or better |
| JUS | 650 | Advanced Qualitative Data Analysis | Advanced qualitative data collection and analysis techniques, including ethnography, in-depth interviews, field notes, coding, transcribing, content analysis, textual analysis. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 660 | Globalization and Economic Justice | Explores the political economy of globalization from a theoretical as well as practical standpoint. Sources used come from a variety of disciplines--sociology, political science, international relations, geography, and economics--all of which contribute unique theoretical and normative tools for analyzing the effect of global forces on economic justice. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student |
| JUS | 669 | Political Trials and Indigenous Justice | Focuses upon research on political trials, deviance, and conceptions of indigenous and contemporary justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| KIN | 101 | Introduction to Kinesiology | Introduces the disciplines and professions associated with kinesiology, including an overview of historical and philosophical foundations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 102 | Forager to Couch Potato: The Obesity & Diabetes Epidemics | Overview of factors leading to the global surge in obesity and type 2 diabetes; the historical, cultural, environmental, and anthropological factors impacting genotypes related to the development of obesity and diabetes; social forces leading to a sedentary lifestyle; and options for reengineering environmental and social institutions to increase physical activity. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 105 | Physical Education Activity | Beginning instruction in a wide variety of sports such as aerobics, aquatics, racquet sports, physical conditioning, and golf. 3 hours per week. Y grade only. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 110 | Research Analysis Laboratory | Introduces basic research areas in the discipline of kinesiology. Topics may include the following: developmental learning, exercise physiology, exercise psychology, exercise testing, metabolic physiology, motor control, motor learning, research journals and societies, research methods, research writing. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-2 | | Pre-requisite: Pre Sec Ed - Physical Ed, Exercise Sci/Phys Educ or Kinesiology major |
| KIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | Prerequisite: maximum 25 hours |
| KIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 205 | Physical Education Activity | Intermediate levels. Continuation of KIN 105. 3 hours per week. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 290 | Introduction to Evidence Based Practice | Introduces best practices for gathering, interpreting, analyzing, synthesizing and evaluating research within the discipline of kinesiology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better; KIN 101 with B or better; ECN 221, JUS 302, POS 401, PSY 230, OBA 221, SOC 390, 395 or STP 226 with C or better; Credit is allowed for only KIN 290 or 294 (Intro Evidence Based Practice) |
| KIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 310 | Collegiate Sports | Participation in men's or women's intercollegiate competition. May be repeated for 4 hours 1 per year. Y/E grade. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 334 | Functional Anatomy and Kinesiology | Muscles, bones, joints, and nerves and how they produce movement. Emphasizes muscle origins, insertions, actions, and innervations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 (ZOL 201) with C or better; BIO 202 with C or better |
| KIN | 335 | Biomechanics | Basic anatomical and mechanical principles applied to human movement. Emphasizes kinematic and kinetic concepts. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202), PHY 111 with C or better; One of the following courses: MAT 170, 210, 251, 270, 271, or 272 with C or better |
| KIN | 340 | Physiology of Exercise | Physiological mechanisms of acute responses and chronic adaptations to exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202) with C or better; one of the following courses: CHM 101, 113, 114, 115, 116, 117, or 118 with C or better |
| KIN | 345 | Motor and Developmental Learning | Principles of motor skill acquisition across the life span, focusing on the learner and the learning environment. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 101) with C or better; BIO 201 (ZOL 201) with C or better |
| KIN | 348 | Psychological Skills for Optimal Performance | Applies psychological techniques and their use to improve effectiveness and performance in sport and related areas. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | |
| KIN | 352 | Psychosocial Aspects of Physical Activity | Interrelationships between physical activity and psychosocial variables, including socialization, cultural values, aggression, and motivation. Includes the psychological benefits of physical activity and exercise adherence. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 100) with C or better |
| KIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 412 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discussion of injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 with C or better; Credit is allowed for only KIN 412 or 512 |
| KIN | 413 | Qualitative Analysis in Sport Biomechanics | Develops systematic approach for detecting and correcting errors in human performance using anatomical and mechanical principles. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 (EPE 335) with C or better |
| KIN | 414 | Electromyographic Kinesiology | Muscular contributions to human movement, muscle mechanics, electrophysiological basis, and practical application of electromyography. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisites: KIN 335 (EPE 335 or PED 335) with C or better; KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 421 | Human Motor Control | Focuses on understanding how the human central nervous system controls, regulates, and learns movements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| KIN | 422 | Motor Control in Special Populations | Discusses principles of motor control theories and related practical applications for certain special developmental populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 423 | Motor Control and Aging | Functional and behavioral changes to the motor control system as humans age, how specifically it impacts motor control and learning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 181; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437 or 537; Credit is allowed for only KIN 437 for KIN 494 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 440 | Exercise Biochemistry | Study of bioenergetics and metabolism of cellular (skeletal muscle, heart, and liver) organelles and proteins during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 440 or 532 |
| KIN | 441 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 441 or 531 |
| KIN | 442 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with C or better; Credit is allowed for only KIN 442 or 536 |
| KIN | 443 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better; Credit is allowed for only KIN 443 or 533 |
| KIN | 444 | Metabolic Adaptations to Exercise Training | Examines physiologic adaptations to exercise training as they relate to metabolism and tissue functions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 445 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with a C or better; Credit is allowed for only KIN 445 or 535 |
| KIN | 447 | ECG Interpretation | Using ECG data, this course comprehensively investigates cardiac arrhythmias and interactions with therapeutic drugs and exercise. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 with C or better; Credit is allowed for only KIN 447 or 547 (or 598 (ECG Interpretation)) |
| KIN | 448 | Applied Sport Psychology | Psychological theories and techniques applied to a sport to enhance the performance and personal growth of athletes and coaches. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 352 (EPE 352 or PED 352) with C or better; Credit is allowed for only KIN 448 or 520 |
| KIN | 450 | Biopsychosocial Perspectives on Physical Activity and Health | Uses a biopsychosocial perspective to examine the interrelationships on physical activity and health (physical and mental). | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 352 (EPE 352) with C or better |
| KIN | 452 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: KIN 352 (EPE 352 or PED 352) with C or better; Credit is allowed for only KIN 452 or 522 |
| KIN | 454 | Motivational Theory in Exercise and Health | Assesses motivational theories relevant to the field of exercise and health psychology. Evaluates research and utilizes the findings to create applied public service announcements targeted toward a specific health issue (e.g., exercise, nutrition, smoking) and a specific population. Assesses students on four group public service announcements and "mini exams" for each unit. Taught in class, online and in a hybrid format. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): KIN 352 with C or better. Credit is allowed for only KIN 454 or KIN 494 (Motivational Theory in Exercise & Health) |
| KIN | 460 | Theory of Strength Training | Research and theories on developing muscular strength; programs for developing muscular strength. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| KIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| KIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Minimum 25 hours |
| KIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | Pre-requisites: BS Kinesiology major; Senior standing |
| KIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| KIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 512 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discusses injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 412 or 512 |
| KIN | 520 | Applied Sport Psychology | Psychological theories and techniques applied to a sport to enhance the performance and personal growth of athletes and coaches. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 448 or 520 |
| KIN | 522 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 452 or 522 |
| KIN | 530 | Exercise Physiology | Immediate and long-term adaptations to exercise with special reference to training and the role of exercise in cardiovascular health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 531 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 441 or 531 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| KIN | 532 | Exercise Biochemistry | Understanding the basic biochemical principles and enzyme pathways involved in energy transduction during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 440 or 532 |
| KIN | 533 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 443 or 533 |
| KIN | 535 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 445 or 535 |
| KIN | 536 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 442 or 536 |
| KIN | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 494 (Comparative Biomechanics and Motor Control), 537 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 547 | ECG Interpretation | Comprehensive investigation of the heart rhythm disturbances that occur within the chambers and conducting tissue of the heart. Partitioned into three sections allowing the systematic review of arrhythmias that occur in the atria, AV junction and ventricles of the heart. The material is designed to maximize understanding by analyzing electrocardiogram rhythm strips to reinforce applying the theoretical component of the course. Also uses the application of these theories through laboratory experiences allowing hands-on experience with electrode placement and 12 lead ECG interpretations. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS Clinical Exercise Physiology or Exercise and Wellness major. Credit is allowed for only KIN 447 or 547 (or 598 (ECG Interpretation)) |
| KIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 598 | Special Topics | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 621 | Motor Learning/Control | Discussion of contemporary research issues in motor learning and control. Includes behavioral and neurophysiological issues. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| KIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KOR | 101 | First-Year Korean I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills, including Han'gul. Lecture, recitation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| KOR | 102 | First-Year Korean II | Continuation of KOR 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisite: KOR 101 |
| KOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 201 | Second-Year Korean I | Continual development of communication skills. Increased emphasis on reading and writing, vocabulary building, and review of fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 102 |
| KOR | 202 | Second-Year Korean II | Continuation of KOR 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 201 |
| KOR | 250 | Korean Culture and Society | Surveys Korean culture and society, covering history, religious traditions, gender, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| KOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 313 | Third-Year Korean I | Continued development of ability to communicate orally and in writing. Exposure to a variety of Korean written styles. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 202 |
| KOR | 314 | Third-Year Korean II | Continuation of KOR 313. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 313 |
| KOR | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| KOR | 347 | Korean Film and Literature | Introduces aspects of Korean history, culture, and society through Korean film and literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| KOR | 350 | Women of Korea | Examines the changing role and status of women in modern Korea in relation to political and cultural changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | H | |
| KOR | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 353 |
| KOR | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity; Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 354 |
| KOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| KOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| KOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| KOR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAA | 345 | Professional Practice Seminar | Landscape architecture practice including contracts, project and office management, liability, licensing, and professional development. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Landscape Architecture student; Co-requisite: LDE 362 |
| LAA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 252 | Natural Systems | Increases awareness and understanding of the biotic and abiotic systems, processes and factors of our biosphere in order to facilitate sustainable landscape architectural design and applications. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Credit is allowed for only LAP 252 or LTC 294 (Natural Systems) |
| LAP | 354 | Plant Materials | Plants as landscape architectural elements. Emphasizes plant identification and the uses of particular plants in landscape architecture. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture major. Co-requisites: LAA 345; LDE 362; Credit is allowed for only LAP 345 or LTC 494 (Plant Materials) |

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| LAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Landscape Architecture BSLA plan; Co-requisite: LDE 461 |
| LAP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| LAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| LAP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| LAP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 205 | Deep Roots: Latin America | Introduces the diversity of Latin-American traditions through its cultural production. The approach is interdisciplinary (art, architecture, literature, film, theater, business and anthropology). Studies the history and culture of Latin America and its concept of identity and nation through a variety of genres. Focuses on aspects that reveal the complexity of Latin America and in turn provides insights into Latin American culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 206 | Locating Latin America:Interdisciplinary Methods | Methodologies course designed to provide exposure to academic fields and research approaches that intersect in Latin American studies | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 330 | From the Inside: The Latin American Journey | Journeys through a wide variety of genres and critical scholarship in Spanish. Provides a broad exposure to different types of reading and writing. Because the Latin American Studies program is flexible, students must be able to engage with many different types of texts across disciplines. Covers Latin American cultural history from pre-Colombian to the post-modern by exploring different formats and genres around major central themes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 340 | Latin American Women Writers | In the 20th and 21st centuries, Latin America has seen a proliferation of literature published by women authors. While this explosion of the written word owes in part to changing socio-economic factors and the opening of the international markets, Latin American women's literary history is often ignored in the canon. Examines the concepts of feminism through a Mexican framework, starting from the point of view of Mexican women theorizing about their own. This is not a history of feminism, but it does aim to highlight certain fundamental texts and key concepts of Mexico's history from the position of women writers, including feminism's critique of social structures beyond the bounds of gender relations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 350 | The Construction of a Nation: Chile in the 20th/21st Century | Examines Chilean history, politics and cultural production through its historical development and explores a multiplicity of cultural issues. Develops knowledge and appreciation of cultural and visual production of Chile and Latin America as well as acquired skills for critically analyzing texts in their applicability to modern-day society. Considers the variety of cultural and artistic productions (novel, poetry, short story, film, music, pop culture, presidential speeches) as sources of social commentary in which observations of national identities are constructed. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Credit is allowed for only LAS 350; ENG 494 (Construction/Nation:Chile in the 20th/21st Cen) or SPA 494 (Construction/Nation:Chile in the 20th/21st Cen) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LAS | 351 | Cityscapes: Urban Mexican Literature and Culture | Examines major developments in contemporary Mexican literature. Begins at mid-20th century as the novel turns away from the rural novel of the Revolution, toward a more urban setting. Mexico City serves as a cultural and political center, and the novels mark social and political changes across different literary currents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 355 | Contemporary Mexican Cinema: Changing Cartographies | Examines major themes and auteurs in contemporary film as their work intersects with larger cultural phenomena, expanding students' cultural knowledge as well as critical communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 471 | Treaties and Cultural Production in Spain and the Americas | Emphasizes sociocultural values associated with national, transborder and transatlantic identities providing a panoramic view of treaties, agreements, constitutions and cultural production by Americans and Spaniards from 1812 to 2012 with particular focus on the themes of nations, borders, citizenship and identity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 480 | Current Trends in Theatre and New Media in Latin America and Spain | Overview of the transatlantic cultural interrelationships between Latin American and Spanish theatre and performance in the 20th and 21st centuries. Explores topics such as cyber-theatre, Internet theatre and multimedia theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| LAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| LAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| LAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| LAT | 101 | Elementary Latin | Basic Latin grammar with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| LAT | 102 | Elementary Latin | Continuation of LAT 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: LAT 101 |
| LAT | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| LAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| LAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 201 | Intermediate Latin I | Final semester of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 102 |
| LAT | 202 | Intermediate Latin II | Beginning reading of Latin authors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 201 |
| LAT | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| LAT | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| LAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 322 | Medieval Latin | Surveys Late Antique and medieval Latin authors and texts, both prose and poetry. Some review of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: LAT 201 with C or better |
| LAT | 360 | Greece and Rome at War | | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |

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| LAT | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| LAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 421 | Roman Literature | Readings in the Latin masterpieces. Authors read change each year in accordance with needs of the class. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |
| LAT | 422 | Roman Literature | See LAT 421. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |
| LAT | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| LAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| LAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 105 | The Structure and Methodology of the American Legal System | What is law? What is the structure of the American legal system? What does it mean to understand law in the context of that system? How is this system effective and problematic and how does its evolution over time change our perceptions of and relationships with those who are part of it? Provides answers to these and other questions while simultaneously developing a working understanding of American law, its practicalities, and externalities. Takes the form of a comprehensive inquiry into the legal system, its origins, structures, applications, success, failure, and decision-making processes. In asking probing questions about the system and its nature, explores the values and philosophies that inform our American conception of the law and its role in society. | N | LEC | N | OPT | College of Law | College of Law Dean's Office | 3 | | |
| LAW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1 | | Pre-requisites: Freshman standing |
| LAW | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | College of Law Dean's Office | 1-4 | | Pre-requisites: JD students may not enroll. |
| LAW | 210 | Law, Culture and Community | Considers how law constructs meaning from the world around us. Explores not only what law is, but why law is, and where law shows up in American public and private life. Examines the roles of law in facilitating cooperation and resolving conflict with an interdisciplinary lens of history, philosophy, religious studies, political and legal theory. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 210 or 294 (Law, Culture & Community) |
| LAW | 215 | Business, Law, and Society | Examines the philosophical and legal framework of business—the basic concepts of business entities, contracts, accountability, and relationships with an emphasis on the social context in which these concepts operate. Emphasizes the concepts of law and ethics throughout the course. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Undergraduate student; Credit is allowed for only LAW 215 or 294 (Business, Law, and Society) |

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| LAW | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 310 | The Global Legal Community | Introduces the building blocks of the developing "global legal community," global governance institutions, both public and private, international law and transnational legal regimes. Examines how dynamic area of law is influenced by, and influences the conduct of the international and domestic relations. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 310 or 394 (The Global Legal Community) |
| LAW | 316 | Introduction to Corporate Tax Law and Policy | Hands-on introduction to the basics of U.S. Federal and Arizona state corporate tax law. Explores the economic and social policy foundations of the tax codes. Students use the tax code to address various business scenarios they may face. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 316 or 394 (Intro Corporate Tax Law&Policy) |
| LAW | 322 | Consumer Protection Law | Since the "Progressive Era" at the turn of the last Century, many new consumer protection agencies were created: The Food and Drug Administration, The Public Health Service, The Federal Trade Commission, Agencies to Control Narcotics, and fifty years later the Consumer Product Safety Commission, the Environmental Protection Agency and the Radiation Health programs, Nuclear Regulatory Commission. Focusing mostly on health products, look at these efforts and their effects on the products we use, the choices we make and the assurances we have as consumers that these products are well manufactured and deliver the goods. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 322 or 394 (Consumer Protection Law) |
| LAW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 480 | Business, Law and Society | What would a legal system that is pro-business look like? Explores the role law plays in American business. Considers what it means to have business relations generally governed by the rule of law, and specifically in the United States legal system. Draws on legal theory, political theory, and American legal history to guide us. Examines some of the legal tools of the trade from property law and contract law that are fundamental to the conduct of American business. Discovers that the development of legal doctrines promoting free enterprise are at times tempered by social justice concerns rooted in conceptions of equality and fairness. Considers how the current legal regulatory climate promoting corporate social responsibility impacts business decisionmaking. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): LAW 210, LAW 215 or 294 (Business, Law and Society); junior or senior standing. Credit is allowed for only LAW 480 or LAW 494 (Business, Law and Society) |
| LAW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 515 | Contracts | Explores common law legal method and the structure of Article 2 of the U.C.C. in the context of issues of contract formation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 516 | Criminal Law | Substantive law of crimes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 517 | Torts | Legal protections of personality, property, and relational interests against physical, economic, and emotional harms. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 518 | Civil Procedure | Explores the structure of a lawsuit and techniques of alternative dispute resolution. Specific topics include commencement of suit, joinder of parties, discovery, pretrial motions, subject matter and personal jurisdiction, res judicata, collateral estoppel, and choice of law under the Erie doctrine. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 519 | Legal Method and Writing | Examines methods used to analyze legal problems. Reviews precedent statutory construction and basic res judicata problems. Use of basic legal writing formats. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 522 | Constitutional Law I | Role of courts in the federal system, distribution of powers between state and federal governments, and the role of procedure in litigation of constitutional questions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 523 | Property | Indicia of ownership, found property, estates in land, landlord tenant, nonpossessory interests in property, nuisance, land use planning, and transfers of interests in property. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 524 | Legal Advocacy | Continuation of LAW 519. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |
| LAW | 529 | Law and the Regulatory State | Introduces the importance, origins, and methods of interpreting statutes, regulations, and court rules. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 530 | Fundamentals of Contract Law | Explores the fundamental principles of contract law under the common-law and Uniform Commercial Code statutory provisions. Focuses on issues of contract formation and interpretation, defenses to enforcement, warranties and conditions, and remedies for breach of contract. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major; Credit is allowed for only LAW 530 or LAW 598, Fundamentals of Contract Law |
| LAW | 581 | U.S. Law and Legal Analysis | Introduces non-JD students to the U.S. legal system and to the types of legal reasoning used by U.S. lawyers and judges. Provides the necessary instruction to use legal reasoning in work, including reading and understanding cases and statutes and applying existing law to the issue presented. Extensive written legal analysis exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |

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| LAW | 582 | Patent Drafting | Prepares students to draft patent applications on behalf of clients. Additionally, students learn the techniques and language necessary to reply to Offices Actions issued by the United States Patent and Trademark Office (USPTO). Provides significant drafting experience, requiring three separate writing submissions and revisions based on instructor feedback throughout the course. Students create work product examples that can be shared with potential employers and/or prospective clients. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major |
| LAW | 585 | Comprehensive Patent Practice | Prepares students for the patent prosecution process, as administered by the United States Patent and Trademark Office (USPTO). Uses a "cradle to grave" approach, beginning with the earliest steps taken when preparing to draft a patent application for a client and ending with post-decision options and activities available to those awarded with an issued patent or denied an issued patent. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 5 | | Prerequisite(s): Master of Legal Studies major |
| LAW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 596 | Professional Legal Writing | Teaches non-JD students how to organize a legal research project by analyzing the facts and identifying the issues involved, determining the research tools needed to correctly investigate the legal problem, and systematically using these tools to strengthen and support the desired legal argument. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |
| LAW | 597 | Visiting Student Program | | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LAW | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 601 | Antitrust Law | Legislation and its implementation to prevent monopoly and business practices in restraint of trade, including restrictive agreements involving price-fixing, trade association activities, and resale price maintenance. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: College of Law student |
| LAW | 602 | Civil Procedure II | Focuses on the Rules of Civil Procedure and how lawyers use the Rules in litigating civil cases from initiation through the pre-trial stages. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | |
| LAW | 603 | Conflict of Laws | Problems arising when the operative facts of a case are connected with more than one state or nation. Choice of law, bases of jurisdiction, effect of foreign judgments, and underlying federal and constitutional issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 604 | Criminal Procedure | Nature of the criminal procedural system with special focus on constitutional protections for the accused. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: College of Law student |
| LAW | 605 | Evidence | Principles and practice governing the competency of witnesses and presentation of evidence, including the rules of exclusion and roles of lawyer, judge, and jury under the adversary system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 606 | Federal Income Taxation | Federal income tax in relation to concepts of income, property arrangement, business activity, and current tax problems, with focus on the process of tax legislation and administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 607 | Nanotechnology Law and Policy | Provides an overview of the legal and policy issues relating to nanotechnology, including risk management, national and international regulations, intellectual property, privacy issues, and liability issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 610 | Advanced Criminal Procedure | Topics in criminal procedure, with emphasis on legal constraints on grand jury investigations, police practices, pretrial release, preliminary hearings, prosecutorial discretion, and plea bargaining. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 611 | Estate and Gift Tax | Tax laws relating to transfer of wealth both at death and during lifetime, including federal estate tax, gift tax, and income taxation of estates and trusts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student; LAW 606 |
| LAW | 612 | Family Law | Legal and nonlegal problems that an individual may encounter because of a situation as a family member. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 613 | Federal Courts | Federal judicial system; relationship of federal and state law; jurisdiction of federal courts and their relation to state courts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 614 | International Contracts | Explores the laws applicable to international contractual relations, focusing heavily on the United Nations Convention on Contracts for the International Sale of Goods. One of several offerings in the field of International Business Transactions, touches on choice of law rules and a comparison of selected UCC with CISG provisions; a comparison of the contract law of selected foreign nations with the UCC; and the law of contracts in the United States. The casebook is heavily oriented toward a problem method of study. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 615 | Public International Law | Role of law in international disputes. Considers drafting and interpretation of treaties and multilateral conventions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |

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| LAW | 616 | Jurisprudence | Introduces legal philosophy, with readings on the nature of law and legal reasoning, the relationship between law and morality and equality and social justice. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| LAW | 618 | Decedent's Estates | Substantive concepts involved in transmitting wealth, including interstate succession, wills and will substitutes, the modern trust as a family protective device, creation of future interests in a planned estate, social restrictions of a nontax nature, and methods of devoting property to charitable purposes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 620 | Civil Rights Legislation | Coverage of the rights and remedies provided by federal civil rights legislation, principally, the key provisions of the Reconstruction Era Civil Rights Acts, portions of the employment discrimination legislation, and voting rights legislation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 621 | Sales | Advanced issues involving the formation and interpretation of sales and lease contracts. Focuses primarily on Articles 2 and 2A of the Uniform Commercial Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 622 | Secured Transactions | Secured transactions under Article 9 of the Uniform Commercial Code and other relevant sections. Overview of the creation, perfection, and priority effects of security interests. Financing of business enterprise and consumer credit. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 624 | Community Property | Property rights of husband and wife; the Arizona community property system; homestead. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-2 | | Pre-requisite: College of Law student |
| LAW | 625 | Constitutional Law II | Fundamental protection for person, property, political, and social rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 626 | Writing for Law Practice | Helps students attain an advanced level of writing proficiency by exposing them to a broad range of legal documents. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: Juris Doctor Candidate; Credit is allowed for only LAW 626 or 665 |
| LAW | 627 | Corporate Taxation | Problems in taxability of the corporation, corporate distributions, and corporate reorganizations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 628 | Creditor-Debtor Relations | Creditors' remedies in satisfaction of claims and debtors' protection and relief under bankruptcy, other laws. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 629 | Employment Law | Employment law topics including testing, privacy, OSHA, FLSA, benefits, worker's compensation, rights to compensation, workplace emotional injuries, termination, and sexual harassment. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 630 | Employment Discrimination | Focuses primarily on Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 631 | Environmental Law | Litigation, administrative law, and legislation relating to problems of environmental quality. Topics covered may include air and water pollution, toxic substances, pesticides, and radiation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 632 | Federal Indian Law I | Inquiry into legal problems special to American Indians and tribes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 633 | Law, Litigation, and Science | Fills a gap in the education of most lawyers, namely, how to effectively think about and use empirical evidence. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 635 | Juvenile Law | Special problems in the juvenile system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 636 | Land Use Regulation | Legal problems in the regulation and control of land development by state and local governments. Administration of zoning, subdivision, and other planning controls; issues of fairness and procedure in the utilization of such controls. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 637 | Lawyering Theory and Practice | Issues of competency and professionalism in the practice of law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 4 | | Pre-requisite: College of Law student |
| LAW | 638 | Professional Responsibility | Emphasizes the Model Rules and Model Code that govern the professional responsibility of lawyers and their interpretation and application. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 639 | Natural Resource Law | Examines the constitutional basis for federal land management and the different kinds of public lands management schemes (e.g., parks, forests, wildlife refuges), emphasizing acquisition of right to, and regulation of, the different uses of public lands and resources (e.g., mining, grazing, timber, wildlife habitat, recreation). | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 640 | Securities Regulation | Selected problems arising under the major statutes concerned with regulating the securities market. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 642 | White Collar Crime | Examines the ways in which white collar crime is prosecuted, principally in the federal system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 643 | Water Law | Acquisition of water rights; water use controls; interstate conflicts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 645 | Patent Law | In-depth examination of substantive patent law as it applies to the commercialization and enforcement of patent rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 646 | Copyright Law | Legal rights in original forms of human expression. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 647 | Mass Tort Litigation | Examines unique procedural and substantive issues that arise in mass tort litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 648 | International Intellectual Property | Considers patents, copyrights, and trademarks under international law and the major international treaties. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 649 | Scientific Evidence | Examines the use of scientists and scientific tests or studies in criminal and civil litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 650 | Health Law | Introduces health law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 651 | Public Health Law | Addresses the relationship between the state and the population's health. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 652 | Bioethics and the Law | Covers a range of issues relating primarily to human reproduction and life and death decisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |

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| LAW | 653 | Bankruptcy | Covers basic bankruptcy law and practices. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 654 | Business Organizations | Covers the primary forms of business organizations: partnerships, limited partnerships, limited liability companies, and corporations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 655 | Chapter 11 | Covers the law and practice of reorganizing business entities under Chapter 11 of the United States Bankruptcy Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 656 | Valuing Real Estate and Closely-Held Businesses | Focuses on the valuation of interests in real property and closely-held businesses. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 657 | Private Property Rights | Explores the conflict between property rights and the right of the government to acquire private property for public use. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 658 | Arizona Constitutional Law | Examines the basic provisions of the Arizona Constitution and the judicial decisions interpreting those provisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student; LAW 522; Pre/Co-requisite: LAW 625 |
| LAW | 660 | Advanced Estate Planning | Covers advanced estate planning and estate administration issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 661 | Constitutional Literacy | Academic complement to the Marshall-Brennan Constitutional Literacy Program where law students teach constitutional law to high school students. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 662 | Alternative Dispute Resolution and Employment Law | The use of alternative dispute resolution has been most extensive in the area of employment law. Mediation and arbitration are widely used not only in the collective bargaining setting, but also in virtually every aspect of the employment relationship. Offers a comprehensive review of the subject with special emphasis on the extensive body of law that has developed in regulating employer-imposed arbitration. Discussion of mediation includes use of simulations to enable the students to understand how mediation can effectively resolve employment disputes. Opportunities to observe real mediations of employment disputes. Experienced attorneys discuss the "real world" use of employment ADR from a plaintiff's and a defendant's perspective. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 664 | Intellectual Property | Surveys the laws conventionally grouped as intellectual property, with a focus on patents, copyrights, and trademarks. Explores the policy rationales for each body of law. Particularly relevant for two types of students: (a) those who are unsure they want to specialize in IP and want a general introduction, and (b) those who do not have room in the schedules to take all of the upper-level offerings here at ASU. Not appropriate for students who have already taken the upper-level courses in copyright, trademark, and patents; students who have taken these offerings may be withdrawn. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 665 | Fundamentals of Legal Drafting | Fundamental writing skills applicable to drafting normative legal documents. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 667 | FDA Regulation | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BMD 667 or LAW 667 |
| LAW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 697 | Visiting Student Program | | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LAW | 701 | Arbitration | Examines the Federal Arbitration Act and the Uniform Arbitration Act as it has been adopted in Arizona. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 702 | Alternative Dispute Resolution | Broad exposure to methods of settling disputes in our society such as mediation, arbitration/conciliation, and negotiation, including examination of the current litigation model. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 703 | Law, Science, and Technology | Legal mechanisms used in dealing with various issues raised by contemporary science and technology. Explores current legal responses to science and technology. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 704 | Federal Indian Law II | Surveys the federal legal doctrines surrounding Indian ownership and exploration of resources. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 705 | Media Law | Examines First Amendment principles and statutory and regulatory requirements with respect to the conventional print and broadcast media, as well as recent technologies such as cable. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 706 | Immigration Law | Explores political, economic, social, and legal issues concerning immigration. Specific topics covered include citizenship and naturalization, denaturalization, deportation, and refugee rights and asylum. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 707 | Elder Law | Looks at legal and policy questions related to aging individuals and an older society. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 708 | Gender, Sexuality, and the Law | Examines assumptions made in the law about gender and sexuality and the impact of those assumptions on the application of the law. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 709 | International Human Rights | International rules and procedures governing the protection of human rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 710 | Real Estate Tax Planning | Discusses topics, including but not limited to real estate investments as tax shelters, alternative acquisition finance devices, refinancing techniques, and nontaxable exchanges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 712 | Religion and the Constitution | In-depth study of the establishment and free exercise clauses of the First Amendment to the U.S. Constitution. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 713 | Tribal Law and Government | Analyzes particular problems in tribal law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 715 | Sports Law | Unique legal problems relating to professional sports, including their relationship to antitrust laws, the nature of player contracts, and associated tax problems. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |

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| LAW | 718 | Economic Development in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: Law major; Credit is allowed for only LAW 718 or PUP 718 |
| LAW | 719 | International Indigenous Rights | Examines the developments in recognizing indigenous rights in people's systems of international law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 720 | Indian Gaming Law | Surveys the law surrounding the Indian gaming industry. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 721 | Education and the Law | Current legal problems affecting institutions of higher education, faculty, students, and governing boards. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 723 | Cultural Resources Law | Focuses on the protection of Native American cultural resources and religions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 724 | Privacy | Traces the development of privacy law with special attention to contemporary challenges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 725 | Critical Race Theory | Focuses on the idea of "race" as a social/political construct and examines the impact of American law on the construction of race. Provide historical and legal background necessary to understand the significance of race within American law and policy. Evaluate a number of legal frameworks that address issues of race and ethnicity in various contexts (e.g. segregation laws, civil rights law, federal Indian law, international human rights law). Assesses various jurisprudential accounts evaluating the ethical and moral underpinnings of the law. Critical race theory is known as a jurisprudential framework that is often critical of standard liberal approaches. Evaluates the critiques of liberalism and the scholarship of both liberal and critical theorists. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 733 | Negotiation | Explores alternative models of negotiated dispute resolution, as well as the roles of lawyer and client in the negotiation process. Extensive use of simulation exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 734 | Products Liability | Traces the development of products liability law; analyzes the major issues currently confronting the courts in this area. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 735 | Teaching Assistant | Legal writing teaching assistants assist a writing professor with various tasks throughout the semester. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 736 | Advanced Legal Research Seminar | Focuses on a rigorous review of basic print and electronic resources and strategies for conducting legal research, federal/state. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 737 | Cults and Alternative Religions | Provides opportunity to study laws and policies governing cults. While the definition of a "cult" will be a topic of initial study in the seminar, it may be conceived of loosely as a group with a charismatic leader whose members are persuaded to relinquish their self-identities and material possessions in furtherance of the group's goals. In addition to analyzing the definition of a "cult," the first part of the seminar discusses the various types of cults, studying particular cults, and learning about cultic activities. The remainder covers domestic and foreign legal and policy issues generated by cults, including the legal rights of cultic organizations, anti-cult organizations, cult members, and cult members' families. Covers conventional religions that are conceptually similar to cults, to the degree that religious movements fall outside the mainstream. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 738 | Trial Advocacy | Confronts issues of trial advocacy through simulation of a variety of aspects of trial practice in a mock court setting. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 605 |
| LAW | 739 | Economics and the Law | Explores premises of the law and economics movements and their applications to property, contract, and tort law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 745 | The Supreme Court | Intensive examination of selected current decisions of the U.S. Supreme Court. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 768 | International Business Transactions | Introduction to U.S., foreign, and international law regulating cross-border business transactions and to the structure of cross-border business deals. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 515 and 654 |
| LAW | 770 | Law Journal | Academic credit for successful completion of editorial work by a member of the staff of Arizona State Law Journal. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 771 | Jurimetrics Journal | Academic credit for successful completion of editorial work by a member of the staff of the Jurimetrics Journal of Law, Science, and Technology. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 772 | Defender Clinic | Placement in the Public Defender Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 773 | Civil Justice Clinic | Placement in the Civil Practice Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 774 | Criminal Practice Clinic | Placement with various prosecutor offices in the Phoenix area and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student; LAW 605 |
| LAW | 775 | Mediation Clinic | Study of the mediation process and experience as mediators in cases pending before the justice courts and administrative agencies. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 776 | Indian Legal Clinic | Provides law students the opportunity to participate in cases dealing with native peoples and Indian issues. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 777 | Innovation Advancement Legal Clinic | Allows students to gain real-world experience in legal areas such as patentability of inventions, patent drafting, and technology valuation. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 778 | Immigration Law and Policy Clinic | Live-client clinic where students represent Latinos, particularly children, in immigration proceedings and the immigration courts. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 781 | Independent Study | With the approval of a faculty member, a student may research a legal subject of special interest and prepare a paper suitable for publication. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |

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| LAW | 782 | Independent Study | See LAW 781. | N | IND | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |
| LAW | 783 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 785 | Externship | Supervised, practical lawyering in an external placement proposed by the student or established by a sponsoring agency and approved by the Sandra Day O'Connor College of Law. In addition, an associated academic component is established by the student with a member of the faculty. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 795 | Cont Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | College of Law | Sandra Day O'Connor College of Law | 1 | | |
| LAW | 797 | Visiting Student Program | | N | LEC | N | Z3 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LDE | 361 | Landscape Architecture I | Site planning; analysis of natural and cultural features; site systems and implications for plan making and design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; ALA 226 with C or better; Co-requisites: LTC 343 |
| LDE | 362 | Landscape Architecture II | Site design; site-specific design of configured space by the creative development of form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 361 (or PLA 361) with C or better |
| LDE | 363 | Landscape Planting Design | Functional and aesthetic use of plants in arid-region landscape design. Explores design philosophies through planning design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Co-requisites: LTC 344, LDE 461 |
| LDE | 461 | Landscape Architecture III | Landscape ecological planning; collection and application of ecological data relevant to planning and design at landscape scale. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 362 with C or better; Co-requisites: LTC 344; LDE 363 |
| LDE | 462 | Landscape Architecture IV | Advanced landscape architecture; integrative capstone studio with multifaceted design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 461 with C or better; Co-requisite: LTC 446; LPH 411 |
| LDE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 305 | Business Law and Ethics for Managers | Legal theories, ethical issues, and regulatory climate affecting business policies and decisions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey student, or non-business student with minimum 2.5 ASU cum GPA and minimum 56 earned hours, or non-degree student with minimum 2.5 ASU cum GPA, or graduate student |
| LES | 306 | Business Law | Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letters of credit, and bank deposits and collections. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-Requisites: Student in Accountancy; Global Management student in Conditional or Professional Business status |
| LES | 380 | Consumer Perspective of Business Law | Role of law as it affects society. Uses case studies to present principles that govern business and consumers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Must have a minimum GPA of 2.00 ASU Cum GPA and a minimum total earned hours of 56, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| LES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree seeking student |
| LES | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student, OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. Credit is allowed for only LES or REA 411 |
| LES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LES | 532 | Negotiation Agreements | Develops negotiation competencies to build partnerships and create lasting agreements with internal/external customers, suppliers, work teams, and external constituencies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: MBA student |
| LES | 579 | Legal and Ethical Issues for Business | Managerial decision making within the bounds of ethics, social responsibility, and legal and regulatory constraints. Strong international focus. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: MBA student |
| LES | 581 | Essentials of Law for Managers | Studies legal components of business decisions, multiple aspects of law affecting business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 582 | Ethical Issues for Managers | Studies ethical decisions; the role of business in society. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIA | 101 | Student Success in the College of Liberal Arts and Sciences | Introduces students to resources that help them succeed in the College of Liberal Arts and Sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Pre-requisite: Freshman standing; Credit is allowed for only LIA 101 or 194 (Intro Liberal Arts & Sciences) |
| LIA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| LIA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | |
| LIA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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|---------|----------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| LIA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LIA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-14 | | |
| LIA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| LIA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | |
| LIA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| LIN | 511 | Phonetics and Phonology | Current trends in phonological theory and its basis in acoustic and articulatory phonetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 514 | Syntax | Analyzes syntactic structures using a generative theoretical model with a focus on English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 515 | American English | Development of the English language in America, including regional and social varieties, and its relationship to other immigrant and native languages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 516 | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Students who have credit for ENG 413, many not enroll in LIN 517 |
| LIN | 520 | Second-Language Acquisition Theories | Theories of second-language acquisition, including the linguistic, cognitive, and sociocultural aspects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 521 | Methods of Teaching English as a Second Language | Methods of teaching English as a second language, language teaching trends, practical applications, and the teaching of different skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 522 | Grammar for TESL | Surveys major grammatical structures in English and how they can be taught to ESL speakers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 523 | Language Testing and Assessment | Introduces the theory and practice of language test construction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 524 | Curriculum Design and Materials Development | Practical guide to curriculum and materials development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional contexts as well as the characteristics of different types of students and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| LIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|----------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------|
| LIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 610 | Advanced Studies in Linguistics | Different topics such as morphology, semantics, typology, history of linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 614 | Advanced Studies in Syntax | Focuses on morphosyntactic feature checking, movement, phrase structure, and their crosslinguistic differences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 615 | Advanced Studies in Sociolinguistics | Language in its social setting, e.g., social variation among native speakers, sociolinguistics aspects of second-language acquisition, and language policy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 616 | Advanced Studies in Discourse Analysis | Advanced analysis of spoken and written discourse emphasizing different methodological and theoretical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 617 | Advanced Studies in Historical Linguistics | Overview of theories on language change, the history of languages, and of methods in historical linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 620 | Advanced Studies in Second-Language Acquisition | Selected topics in second-language acquisition, such as phonetics and phonology, morphology, syntax, and discourse. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing—an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ENG or LIN 625 |
| LIN | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to English studies. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Students who have credit for ENG 413, many not enroll in LIN 517 |
| LIS | 533 | Current Library Problems | Critical analysis of current practices and problems in school librarianship. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| LIS | 563 | Children's Literature | Selects and uses children's literature and related nonprint media to support the elementary school curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| LIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| LIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| LIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requirement: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LNP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LNP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LNP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LNP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 310 | History of Landscape Architecture | Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Pre-requisites: Landscape architecture majors; ALA 100 or ALA 102; passed the degree milestone review, or non-majors with sophomore standing |
| LPH | 311 | 20th-Century Landscape Architecture | Explores concerns, projects, and movements in landscape architecture of late 20th-century understanding; social, ecological, regional, and historical influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites:Landscape architecture majors; ALA 100 or 102; passed the degree milestone review, or non-majors with junior standing |
| LPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 411 | Landscape Architecture Theory and Criticism | Critically analyzes landscape architecture theories and projects to evaluate validity of design and contribution to society. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisites: Landscape Architecture; LDE 461 and LPH 311 with C or better; Co-requisites: LDE 462 and LTC 446 |
| LPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 241 | Human Genetics | Introduces basic concepts of human heredity and cytogenetics, including Mendelian, molecular, and population genetics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| LSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 322 | Fundamentals of Ecology Laboratory | Investigational field course on fundamental concepts in ecology. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 320 or BIO 320 (with C or better if completed) |
| LSC | 347 | Fundamentals of Genetics | Science of genetics, gene flow, and genetic engineering in humans and other organisms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) and CHM 116 with C or better |
| LSC | 348 | Fundamentals of Genetics Laboratory | Investigational lab using modern molecular techniques to analyze various genetic phenomena. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; CHM 113 with C or better; CHM 116 with C or better; Pre or Co-requisites: LSC 347 (with C or better if completed) |
| LSC | 350 | Premedical Professional Seminar | An opportunity for students who anticipate a career in any area of medicine to explore the realities of the field. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 or 188, BIO 182 or 188, BIO 353 or LSC 353, and BIO 340 or LSC 347 with C or better |
| LSC | 354 | Developmental Anatomy Lab | Experimental studies of developmental processes in animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | |
| LSC | 359 | Animal Physiology Laboratory | Investigative lab experience using animals (including humans) and models. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 358 or BIO 360 (with C or better if completed) |
| LSC | 362 | The Human Environment | Evolution of humans' physiological, ecological, and behavioral interaction with their environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| LSC | 363 | Genes, Race, Gender, and Society | Examines biological events and theories on race and gender and their interface with societal views. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188), BIO 182 (or BIO 187), BIO 340 (or LSC 347), LSC 353 and CHM 234 with C or better |
| LSC | 365 | The Human Organism | Analyzes human anatomy, physiology, and behavior in an ecological and evolutionary context with the methods of comparative biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| LSC | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| LSC | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375, Credit is allowed for only FOR or LSC 376 |
| LSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LSC | 430 | Environmental and Human Toxicology | Lecture/fieldwork course investigating toxic substances in the environment and their effect on the health of organisms, including humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188), BIO 182 (or BIO 187), and CHM 116/115 with C or better |
| LSC | 432 | Fundamentals of Pharmacology | Aspects of pharmacology using an integrated approach to familiarize students with natural and synthetic therapeutic agents used in medicine. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: LSC 347 or BIO 340; LSC 353 or BIO 353; LSC 366; LSC 394 Topic: Modern Concepts in Biochemistry; BCH 361, or BCH 461; CHM 234 or CHM 231 |
| LSC | 434 | Marine Ecology | Examines ecological processes in oceans, seas, and estuaries that emphasizes species- and community-level phenomena. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; LSC 320 or BIO 320 with C or better |
| LSC | 447 | Molecular Genetics Laboratory | Investigative lab involving DNA isolation, PCR, gel electrophoresis, enzyme digestion and ligation, transformation, and hybridization analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | |
| LSC | 450 | Premedical Externship | Provides hands-on experience in a hospital setting for premedical students. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: LSC 350 with C or better |
| LSC | 475 | Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394: Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| LSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| LSC | 486 | Peer Mentoring in the Life Sciences | Advanced students learn and apply mentoring skills in teaching labs. | N | SEM | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours |
| LSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| LSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| LSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LAB | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LAB | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |
| LSE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 343 | Landscape Construction I | Landscape constructions focusing on landform transformations. Topics include landform analysis, grading, and earthwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: LDE 361 |
| LTC | 344 | Landscape Construction II | Characteristics of materials and methods used in landscape architectural construction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 343 with C or better; Co-requisites: LDE 363 and 461 |
| LTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 446 | Landscape Construction III | Landscape construction focusing on low-technology, biotechnical, regional, and experimental techniques or systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 344 with a C or better; Co-requisites: LDE 462 and LPH 411 |
| LTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAE | 100 | Introduction to Mechanical and Aerospace Engineering | Introduces mechanical and aerospace engineering, design process, teaming, the profession of mechanical and aerospace engineering, computer models in engineering, communication skills, CAD tools, and programming tools. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2 | | Pre-requisites: Aerospace or Mechanical Engineering student |
| MAE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Pre-requisites: MAE Freshman student |

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| MAE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 212 | Engineering Mechanics | Force systems, resultants, moments and equilibrium. Kinematics and kinetics of particles, systems of particles and rigid bodies. Energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical or Aerospace Engineering student; PHY 121 C or better; Pre- or Corequisite(s): MAT 274 or 275 (with C or better if completed) or Non-Mech/Aero student; PHY 121; Pre- or Corequisite(s): MAT 274 or 275 |
| MAE | 213 | Solid Mechanics | Equilibrium, strain-displacement relations, and stress-strain-temperature relations. Applications to force transmission and deformations in axial, torsional, and bending of bars. Combined loadings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: CEE 210, CEE 211 or MAE 212 with C or better; MAT 274 (or 275) with C or better |
| MAE | 214 | Computer-Aided Engineering I | Introduces geometry and construction techniques in CAD, technical drawing conventions, generating drawings from CAD models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Pre-requisites: Mechanical & Aerospace Engineering student; MAE 212 (or ECE 212 or ECE 214) with C or better or Corequisite: MAE 212 |
| MAE | 215 | Introduction to Programming in MATLAB | Introduces basic topics and concepts of computer programming in MATLAB. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical and Aerospace Engineering BSE student; MAT 265 (or 270); Credit is allowed for only MAE 215 or 294 (Introduction to Programming) |
| MAE | 240 | Thermofluids I | Introductory concepts of thermodynamics, fluid mechanics, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Pre-requisites: Mechanical & Aerospace Engineer or Fulton BSE student with MAE 212 and MAT 275 with C or better or Non MAE student with CEE 212 (may be co-enrolled) or MAE 212 with C or better |
| MAE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 301 | Applied Experimental Statistics | Introduces key concepts in probability and statistics with engineering applications. Emphasizes modeling variation in observations, characterizing its distribution, and making inferences with regard to quality assurance and control. Develops critical skills such as fitting multivariate models, experimental design, and hypothesis testing, utilizing data from engineering projects, simulations, and laboratory experiences. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: MAE 215 and 384 with C or better; MAT 242 and 275 with C or better; Credit is allowed for only MAE 301 or 394 (Applied Experimental Statistics) |
| MAE | 318 | System Dynamics and Control | Dynamics of physical systems, system modelling, feedback control, computer simulations and real-time experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 5 | | Prerequisite(s): Aerospace or Mechanical Engineering BSE major; EEE 202 with C or better; MAE 212 with C or better; MAE 384 with C or better; PHY 131 with C or better; Pre- or corequisite: MAE 301 or MAE 394 (Applied Experimental Statistics) |
| MAE | 341 | Mechanism Analysis and Design | Positions, velocities, and accelerations of machine parts; cams, gears, flexible connectors, and rolling contact; introduces synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 212 with C or better |
| MAE | 345 | Structures in a Space Environment | Space mission environment; mechanical behavior of materials and structures for space; analysis and design of space structures; finite element procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 214 and 384 with C or better; Pre- or corequisite(s): MAE 318 and 384 with C or better if completed |
| MAE | 351 | Manufacturing Processes | Production technique and equipment. Casting and molding, forming, machining, joining and assembly, computer-integrated manufacturing, rapid prototyping, and electronics manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MSE 250 with C or better; Credit is allowed for only IEE 360 or MAE 351 |
| MAE | 372 | Fluid Mechanics | Applies basic principles of fluid mechanics to problems in viscous and compressible flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 or MAE 360 with C or better; MAE 384 with C or better |
| MAE | 384 | Advanced Mathematical Methods for Engineers | Methods for numerical solutions to engineering problems. Nonlinear equations, quadrature, ordinary differential equations. Analytical and numerical solutions to partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | CS | Prerequisite(s): FSE undergraduate; With C or better: MAT 274 or 275; MAT 242 or 343 (or 342 if not MAE); MAE 215 (or MAE 294 Intro to Programming, CSE 100, or 110); Pre- or corequisite(s): MAT 267 or 272 with C or better; Credit for only CEE or MAE 384 |
| MAE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 400 | Engineering Profession | Impact of mechanical and aerospace engineering in a global and societal context; effects of and on globalization; environment, sustainability, economy, politics; engineering ethics and business practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Pre-requisites: Aerospace Engineering or Mechanical Engineering BSE majors; MAE 322 (or MAE 325 or MAE 394 Aerospace Structures and Materials) with C or better |
| MAE | 404 | Finite Elements in Engineering | Introduces ideas and methodology of finite element analysis. Applications to solid mechanics, heat transfer, fluid mechanics, and vibrations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 or ECE 313 with C or better; CEE 384 or MAE 384 or ECE 384 with C or better |
| MAE | 406 | Advanced CAE Simulation | Solution of advanced engineering problems with engineering software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: MAE 323; MAE 342 with C or better. Credit is allowed for only MAE 406 or MAE 546 |
| MAE | 417 | Control System Design | Tools and methods of control system design and compensation, including simulation, response optimization, frequency domain techniques, state variable feedback, and sensitivity analysis. Introduces nonlinear and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better |
| MAE | 436 | Combustion | Thermochemical and reaction rate processes; combustion of gaseous and condensed-phase fuels. Applications to propulsion and heating systems. Pollutant formation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 with C or better; Credit is allowed for only MAE 436 or MAE 536 |
| MAE | 442 | Mechanical Systems Design | Applies design principles and techniques to the synthesis, modeling, and optimization of mechanical, electromechanical, and hydraulic systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Pre-requisites: Engineering BS/BSE students; MAE 318 with C or better; MAE 342 or MAE 344 with C or better |
| MAE | 447 | Robotics and Its Influence on Design | Robot applications, configurations, singular positions, and work space; modes of control; vision; programming exercises; design of parts for assembly. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Engineering BS/BSE students; MAE 318 with C or better |
| MAE | 455 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 290 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |

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| MAE | 469 | Projects in Astronautics or Aeronautics | Various multidisciplinary team projects available each semester. Projects include design of high-speed rotorcraft autonomous vehicles, liquid-fueled rockets, microaerial vehicles, satellites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| MAE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MAE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students; Credit is allowed for only MSE 501 or MAE 501 |
| MAE | 502 | Partial Differential Equations in Engineering | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; credit is allowed for only MSE 502 or MAE 502 |
| MAE | 504 | Experimental Methods for Thermal and Fluid Processes | Theory of analog and digital signal analysis as applied to fluid and thermal measurements; optical diagnostics and micro sensors for measuring fluid velocity, pressure and temperature in unsteady flows; particle image velocimetry and thermal anemometry. Experimental methods are applied in a weekly laboratory. Students should have familiarity with Matlab or some programming language and have completed an intermediate level course in fluid dynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Graduate Engineering major |
| MAE | 505 | Perturbation Methods | Nonlinear oscillations, strained coordinates, renormalization, multiple scales, boundary layers, matched asymptotic expansions, turning point problems, and WKBJ method. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students; Credit is allowed for only APM 575 or MAE 505 |
| MAE | 506 | Advanced System Modeling, Dynamics, and Control | Lumped-parameter modeling of physical systems with examples. State variable representations and dynamic response. Introduces modern control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students; MAE 501 with C or better. |
| MAE | 507 | Fundamentals of Control and Optimization | Optimal control of continuous-time dynamic systems. Linear systems and signal spaces, robust and LQR optimal control, optimization methods and LMIs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; MAE 506 with C or better |
| MAE | 510 | Dynamics and Vibrations | Lagrange's and Hamilton's equations, rigid body dynamics, gyroscopic motion, and small oscillation theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students |
| MAE | 512 | Random Vibrations | Reviews probability theory, random processes, stationarity, power spectrum, white noise process, random response of single and multiple DOF systems, and Markov processes simulation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2-3 | | Pre-requisite: Graduate Engineering major |
| MAE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MAE | 515 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems, exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 510 with C or better; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| MAE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Fulton Engineering Graduate students; Credit is allowed for only CHE 518, EEE 518, MSE 475, MSE 518 or MAE 518 |
| MAE | 520 | Stress Analysis | Introduces tensors: kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 521 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 501 with C or better; CEE 526 or MAE 527 with a C or better |
| MAE | 523 | Fracture Mechanics | Linear elastic fracture mechanics. Nonlinear problems. Fatigue fracture. Experimental methods in fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; CEE 521 or MAE 520 with C or better |
| MAE | 524 | Theory of Elasticity | Elastic behavior in two and three dimensions. Airy stress functions and displacement potentials. Elements of fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 520 with C or better |
| MAE | 525 | Mechanics of Smart Materials and Structures | Modeling and analysis of smart materials and adaptive structures. Application areas include vibration and shape control and damage detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 510 with C or better |
| MAE | 527 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 501 with C or better |

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| MAE | 536 | Combustion | Thermodynamics; chemical kinetics of combustion. Explosion and ignition theories. Reactive gas dynamics. Structure, propagation, and stability of flames. Experimental methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student. Credit is allowed for only MAE 436 or 536 |
| MAE | 540 | Advanced Product Design Methodology | Surveys research in engineering design process, artifact and design, knowledge, formal and informal logic, heuristic and numerical searches, theory of structure and complexity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical or Aerospace Engineering graduate student |
| MAE | 541 | CADTools for Engineers | Elements of computer techniques required to develop CAD software. Data structures, including lists, trees, and graphs. Computer graphics, including 2- and 3-D algorithms and user interface techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 542 | Design Geometry and Kinematics | Selected topics in geometry related to current potential applications in CAD/CAM, design theory, kinematics, and robotics. Euclidean isometrics, transformations; 4-D geometry; screw theory and its applications to robotics and assemblies. Differential geometry; its curvature and torsional properties of curves and surfaces. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical and Aerospace Engineering graduate student. Credit is allowed for only MAE 542 or 598 (Design Geomtry & Kinematics) |
| MAE | 544 | Mechanical Design and Failure Prevention | Modes of mechanical failure; applies principles of elasticity and plasticity in multiaxial state of stress to design synthesis; failure theories; fatigue; creep; impact. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 546 | Advanced CAE Simulation | Solution of advanced engineering problems with analysis software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MAE 406 or 546 |
| MAE | 547 | Modeling and Control of Robots | Homogeneous transformations, workspace, forward and inverse kinematics, differential kinematics, statics and dynamics, motion planning, motion and force control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 557 | Mechanics of Composite Materials | Analysis, design, and applications of laminated and chopped fiber reinforced composites. Micro- and micromechanical analysis of elastic constants, failure, and environmental degradation. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 561 | Computational Fluid Dynamics | Finite-difference and finite-volume techniques for solving the subsonic, transonic, and supersonic flow equations. Method of characteristics. Numerical grid-generation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; Credit is allowed for only AEE 471 or MAE 471, 561 |
| MAE | 564 | Advanced Aerodynamics | Perturbation method. Linearized subsonic and supersonic flows. Thin wing/slender body theories. Lifting surface theory. Panel method computation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 566 | Rotary-Wing Aerodynamics | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE 466 or 566 |
| MAE | 570 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics; property relationships, power and refrigeration cycles, and reactive systems. A basic knowledge of thermodynamics is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only MAE 482, 570 or 598 (Thermodynamics), or MEE 482 |
| MAE | 571 | Fluid Mechanics | Basic kinematic, dynamic, and thermodynamic equations of the fluid continuum and their application to basic fluid models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 573 | Advanced Fluid Mechanics | Mechanics of fluids flows where either the effects of inertia or viscosity are significant. Exact and approximate solutions of the Navier-Stokes equations, laminar flow and flow at low and high Reynolds numbers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 574 | Fluid Transport in Micro/Nanoscale Devices | Focuses on fundamental fluid transport physics in micron and nanometer scale devices. At small length scales fluid motion and transport is governed by electromagnetic, interfacial, and stochastic phenomena that differentiate these flows from typical macroscale flows. In microscale devices these phenomena enable new and high-performance separation, concentration, control, and diagnostic processes. Core concepts are presented along with discussions of state-of-the-art micro and nanoscale total analytical devices. Requires knowledge of fluid mechanics, electrostatics, heat and mass transfer, and partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 575 | Turbulence | Homogeneous, isotropic, and wall turbulence. Experimental results. Introduces turbulent-flow calculations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 577 | Advanced Turbulence | Reynolds equations and their closure. Modeling of simple and complex turbulent flows, calculations of internal and external flows, and application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 578 | Geophysical and Environmental Fluid Dynamics | Dynamics of large-scale flows under the influence of stratification and earth rotation. Thermally and mechanically driven flows in turbulent boundary layer. Waves and instability of geophysical flows. Global-scale circulation. Applications to environmental prediction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 581 | Advanced Thermodynamics | Basic concepts and laws of classical equilibrium thermodynamics; applications to engineering systems; introduction and applications of statistical mechanics and kinetic theory; Boltzmann integro-differential equation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 585 | Solar Thermal Engineering | Solar energy availability, flat-plate and concentrating solar thermal collectors, solar heating and cooling, concentrating solar power (CSP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering student; credit is allowed for only MAE 585 or 598 (Solar Thermal Engineering) |
| MAE | 586 | Advanced Heat Transfer | Basic concepts and governing equations. Analysis of laminar and turbulent heat transfer for internal and external flows. Natural and mixed convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |

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| MAE | 587 | Radiation Heat Transfer | Advanced concepts and solution methodologies for radiation heat transfer, including exchange of thermal radiation between surfaces, radiation in absorbing, emitting, and scattering media and radiation combined with conduction and convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MAE | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisites: Graduate Engineering major; Credit is allowed for only MAE 588 or SEC 588 |
| MAE | 589 | Heat Transfer | Basic concepts; physical and mathematical models for heat and mass transfer. Applications to conductive, convective, radiative, and combined mode heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MAE 494 topic (Heat and Mass Transfer) or 589 |
| MAE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MAE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Pre-requisites: Graduate Engineering student |
| MAE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAK | 101 | Elementary Macedonian | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| MAK | 102 | Elementary Macedonian | See MAK 101. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| MAK | 201 | Intermediate Macedonian | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| MAK | 202 | Intermediate Macedonian | See MAK 201. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| MAK | 311 | Macedonian Composition and Conversation | Advanced communicative proficiency and writing development. Intended for students enrolled in ASU Study Abroad University of Ss. Kiril and Metodij. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-8 | | |
| MAK | 312 | Macedonian Composition and Conversation | Advanced communicative proficiency and writing development. Intended for students enrolled in ASU Study Abroad University of Ss. Kiril and Metodij. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-8 | | |

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| MAK | 411 | Advanced Macedonian Composition and Conversation | Improves self-expression in oral and written skills, emphasizing vocabulary building and use of newspapers and other materials published in Macedonia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-8 | | |
| MAK | 412 | Advanced Macedonian Composition and Conversation | Improves self-expression in oral and written skills, emphasizing vocabulary building and use of newspapers and other materials published in Macedonia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-8 | | |
| MAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 501 | Methods for Interdisciplinary Inquiry | Critical survey of current models of inquiry, tools, processes, and methods in different fields. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 502 | Perspectives in Interdisciplinary Studies | Introduces interdisciplinarity through explorations of epistemological and rhetorical practices that bridge traditional disciplines. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 503 | Post-Holocaust and Reparative Ethics | Examines ethical possibilities suitable for global coexistence among secular, spiritual, and postsecular perspectives. Considers varied sources for ethical thinking in twentieth- and twenty-first centuries: existential ethics, critical theory, race and gender theory, postmodern ethics, and reparative ethics. "Post-Holocaust" Ethics refers specifically to philosophy, ethics, and religion after Shoah and coming to terms with unforgivable harm, trauma, genocide, and cruelty. The seminar considers possibilities for hope after the irreparable. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Graduate (degree or nondegree) student; Credit is allowed for only MAS 503 (AEP 502), PHI 502 or REL 582 |
| MAS | 505 | Theories of Change, Culture, and Mind | Introduces graduate-level interdisciplinary study of key thinkers, movements, theories, and paradigms in 20th-century thought. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 510 | Science and Religion: Cosmologies and Worldviews | Examines science and religion, stressing modern scientific findings and philosophical and historical debates and dialogues. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Credit is allowed for only IAS 430 or MAS 510 |
| MAS | 511 | Technology, Environment and Humanity | Critically analyzes technology in relation to human and environmental issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 512 | History and Philosophy of the Social Sciences | Examines the development, historical context, and long-term importance of major theories of human nature from the 17th century until today. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 513 | Sociology of Everyday Life | Examines institutional ethnography, a way of exploring the particular and generalized social relations that shape people's everyday experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 529 | Latinas and Latinos, Schooling, and Social Inequality | Advanced interdisciplinary understanding of the issues facing Latinas and Latinos in K-16 schooling in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 550 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary postsecular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-9 | | Prerequisite: Graduate (degree or nondegree) student; Credit is allowed for only MAS, PHI 550 or REL 585 |
| MAS | 553 | Latin American Cities | Interdisciplinary study of Latin American world cities (e.g., Mexico City, Santiago) emphasizing integration with U.S. cities, including Los Angeles and Phoenix. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 573 | Art and Politics | Explores issues and relationships between the arts and politics through historical examples, significant artists and works, key thinkers, and theoretical approaches. Considers topics such as: the arts and ideology; art and the politics of representation, propaganda, censorship, state-supported art, human rights, revolution and war, cultural change, and political aesthetics. Emphasizes interdisciplinary arts and period study, including the arts and The Russian Revolution, the art in the Weimar Republic and Nazi Germany, and, generally, the arts, art and social movements (e.g., U.S. Civil Rights era, Eastern Europe's solidarity movement and Velvet Revolutions), as well as the arts and politics in selected contemporary contexts (e.g., China, the Middle East). | N | LEC | N | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 585 | Capstone Course | Assists students in preparing their capstone project, which represents the culmination of their study for the MA in Interdisciplinary Studies. | N | RSC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-4 | | Pre-requisites: Interdisciplinary Studies Masters student |

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| MAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Mathematics Placement Test |
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 171 | Precalculus: Science, Technology, Engineering and Mathematics (STEM) | Robust treatment of advanced algebraic skills and trigonometry that are vital in calculus. Algebra topics include functions, compositions, inverses, transformations, complex numbers, roots of polynomial functions, rational functions, exponential and logarithmic functions and their properties. Trigonometry is approached via the unit circle as well as the right triangle. Topics include the trigonometric functions, their graphs and identities, inverse trigonometry, the laws of sine and cosine, vectors and the dot product with an application toward work, and polar coordinates and roots of complex numbers (deMoivre's theorem). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Pre-requisites: MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-5 | | |
| MAT | 207 | Algebra and Geometry in the High School | Provides a conceptually rigorous treatment of the central ideas of algebra and geometry in high school. Explores and develops familiar mathematical content from a very different perspective. Focuses squarely on creating meaning for concepts and on building coherence of meaning across concepts and various representations of them. As such, course activities and assessments (class/lab activities, homework assignments, and exams) reflect these expectations, focusing on both doing high school mathematics with meaning and on expressing and communicating that meaning accurately and coherently in verbal and written form. Prior to enrolling in this course, students should have experience with algebra/geometry to at least the high school level. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Co-requisite: MTE 210 |

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| MAT | 208 | Discrete Mathematics for Secondary Teachers | Potential secondary teachers of mathematics should master the Math Standards proposed by the National Council of Teachers of Mathematics for college-intending students. Focuses on those aspects of these standards that apply to discrete mathematics with particular emphasis on: mathematical problem solving, mathematics as communication, mathematical reasoning, and discrete mathematics. Taking a broader view, introduces mathematics as a discipline that uses known methods to discover and verify new conclusions through the study of discrete mathematics. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. Not open to students with credit in MAT 260 or 270 or 290. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 (or 119, 170 or 171) with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210, 251, 265 or 270 |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 242 | Elementary Linear Algebra | Introduces matrices, systems of linear equations, determinants, vector spaces, linear transformations, and eigenvalues. Emphasizes development of computational skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 2 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 251 | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210, 251, 260, or 270 |
| MAT | 265 | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher. Credit is allowed for only MAT 265 or MAT 270 |
| MAT | 266 | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 267 | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 271 | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 272 | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | 274 | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 300 | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | 310 | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | 340 | Theory of Interest | Compound interest, discount rates, annuities, present values, depreciation, and bond valuations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, 251, 265 or 270 with C or better; Credit is allowed for only ACT 310 or MAT 340 |
| MAT | 342 | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 350 | Techniques and Applications of Applied Mathematics | Mathematical techniques and applications representative of the range of applied mathematics used in operations research, biology, economics, finance, and sociology. In depth exploration of these techniques in detail by focusing on selected applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275; MAT 342 or 343; Co-requisite: STP 420 |
| MAT | 351 | Mathematical Methods for Genetic Analysis | Discrete mathematics, probability, statistics, and associated computer packages. Applications to genomics, bioinformatics, forensics, and DNA/protein sequence patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 270 (or MAT 251 or 265) with C or better |
| MAT | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 119, 210, 243, 251, 265, 270 or STP 220, 231 or 226 with C or better; Credit is allowed for only BIO 355, CPI 480, MAT 355 or MBB 355 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MAT | 362 | Advanced Mathematics for Engineers and Scientists | Vector analysis, Fourier analysis, and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 274 (or 275) with C or better |
| MAT | 370 | Intermediate Calculus | Theory behind basic 1-variable calculus: continuity, derivative, Riemann integral, sequences, and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 300 (or 243) with C or better; Credit is allowed for only MAT 371 (with C or better) or MAT 370 |
| MAT | 371 | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | 372 | Advanced Calculus II | Open, closed, compact sets in \mathbb{R}^n continuity, differentiation, partial differentiation, integration in \mathbb{R}^n inverse/implicit function theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 371 with C or better; Pre/Co-requisite: MAT 342 or 343 (with C or better if completed); Credit is allowed for only MAT 372 or MAT 460 |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 410 | Introduction to General Topology | Topological spaces, metric spaces, compactness, connectedness, and product spaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300 with C or better |
| MAT | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |
| MAT | 415 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Pólya theory and combinatorial structures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 415 or 512 |
| MAT | 416 | Introduction to Graph Theory | Trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 416 or 513 |
| MAT | 419 | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 420 | Scientific Computing | Surveys and applies programming languages, libraries, and scientific visualization tools. Programming assignments emphasize software development skills. Completion of advanced calculus recommended prior to this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 205; MAT 274 (or MAT 275), 342 (or MAT 343) |
| MAT | 421 | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |
| MAT | 423 | Numerical Analysis I | Solution of systems of linear and nonlinear equations, optimization, eigenvalues, round-off error, and floating point arithmetic. Fluency in computer programming is required for enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 342 (or 343) with C or better |
| MAT | 425 | Numerical Analysis II | Analysis of and algorithms for numerical interpolation, integration, and differentiation. Numerical solution of ordinary and partial differential equations, introductory level. Applications. Fluency in computer programming is required for success in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 (or 275) with C or better; MAT 371 recommended |
| MAT | 429 | Optimization | A variety of optimization models and their applications to management, economics, engineering, and science. Topics include linear programming, integer programming, nonlinear programming, and stochastic programming. Stresses formulation and modeling as well as numerous applications and solving algorithms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 with C or better; MAT 350 or 419 with C or better |
| MAT | 440 | Group Theory | Covers basic group theory. Students learn about the concept of a "group," related structures, their underlying theory and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 441 | Ring Theory | Covers basic ring theory. Students learn about the concept of a "ring," related structures, their underlying theory, and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 442 | Advanced Linear Algebra | Fundamentals of linear algebra, dual spaces, invariant subspaces, canonical forms, bilinear and quadratic forms, and multilinear algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343 |
| MAT | 443 | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | 444 | Intermediate Abstract Algebra | Basic theory of groups, rings, and fields, including an introduction to Galois theory. Appropriate as preparation for MAT 543. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 442 or 443 with C or better |
| MAT | 445 | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | 447 | Cryptography I | Block ciphers, stream ciphers, congruence arithmetic, information theory, public key cryptosystems, key exchange, electronic signatures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 100 (or CSE 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 448 | Cryptography II | Mathematical underpinnings of contemporary cryptosystems, electronic signatures, key exchange, primality testing and factorization algorithms. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 447. Credit is allowed for only MAT 448 or MAT 494, Cryptography II |
| MAT | 450 | Mathematical Models in Biology | Introduces mathematical models in biological systems. Applications range from the cellular level to systems level and may include applications from areas such as physiology, ecology, epidemiology, population biology, computational and systems biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 (or 342) with C or better; MAT 275 (or 274) with C or better |
| MAT | 451 | Mathematical Modeling | Detailed study of 1 or more mathematical models that occur in the physical or biological sciences. May be repeated for credit with instructor approval. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 452 | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions; strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |

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| MAT | 460 | Vector Calculus | Vectors, curvilinear coordinates, Jacobians, implicit function theorem, line and surface integrals, Green's, Stokes', and divergence theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended; Credit is allowed for only MAT 372 or 460 |
| MAT | 461 | Applied Complex Analysis | Analytic functions, complex integration, Taylor and Laurent series, residue theorem, conformal mapping, and harmonic functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 462 | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 472 | Intermediate Real Analysis I | Introduces analysis in metric spaces with emphasis on the real line. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 371 with C or better |
| MAT | 473 | Intermediate Real Analysis II | Analysis in \mathbb{R}^n : implicit function theorem, introduction to manifolds, Lebesgue integration, change of variables formula, convergence theorems for integrals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 472 with C or better |
| MAT | 475 | Differential Equations | Linear and nonlinear ordinary differential equations, asymptotic behavior of solutions, stability, existence and uniqueness, limit sets, Poincaré-Bendixson theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274 or 275 with C or better; MAT 370 or 371 with C or better |
| MAT | 476 | Partial Differential Equations | First-order quasilinear, second-order linear (wave, Laplace, heat). Characteristics, harmonic functions, maximum principles, Fourier series, separation of variables. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274, 275 or 475 with C or better; MAT 370 or 371 with C or better |
| MAT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): minimum 45 hours |
| MAT | 485 | History of Mathematics | Topics from the history of the origin and development of mathematical ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 495 | Supervised research in mathematical sciences | Supervised research in mathematical sciences. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or MAT 495 |
| MAT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| MAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MAT | 512 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Polya theory and combinatorial structures. Same topics as MAT 415; mastery at much higher level required. Students with MAT 415 (even as undergraduates) may not enroll. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only MAT 415 or 512 |
| MAT | 513 | Introduction to Graph Theory | Rigorous introduction to graph theory. High-level mastery in topics such as trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MAT 416 or 513 |
| MAT | 514 | Enumerative Combinatorics I | First semester of a systematic development of enumerative combinatorics, including elementary counting techniques, sieve methods, and partially ordered sets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 515 | Enumerative Combinatorics II | Second semester of a systematic development of enumerative combinatorics, including lattices, exponential structures, symmetric functions, and selected special topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 516 | Graph Theory I | First semester of a systematic development of graph theory, including matchings, connectivity, arboricity, planarity, coloring, network flows. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 517 | Graph Theory II | Second semester of a systematic development of graph theory, including dense and sparse graphs, Ramsey theory, hamiltonicity, random graphs, minors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 518 | Combinatorial Optimization | Systematic development of combinatorial optimization, including linear programming, duality, primal-dual algorithms, network flow algorithms, weighted matchings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 541 | p -Adic Numbers | Introduces p -Adic numbers and analysis. Topics include valuations, completions of number fields, extensions of the field of p -adic numbers and p -adic analysis. Students should have previously taken courses in analysis and algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 542 | Elliptic Curves | Geometry and arithmetic of elliptic curves, points of finite order, the group of rational points, curves over finite fields, complex multiplication. Students should have previously taken a senior-level course in abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MAT | 543 | Abstract Algebra I | Groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 544 | Abstract Algebra II | Continuation of groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 543 |
| MAT | 545 | Abstract Algebra III | Covers modules, Galois theory, and preparation for advanced study in algebraic parts of mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 547 | Algebraic Number Theory | Algebraic properties of number fields and their completions. Topics include rings of integers, ramification, finiteness of the class group, and Dirichlet's unit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 548 | Class Field Theory | Theory of the abelian extensions of global and/or local fields. Students should have previously taken a course in algebraic number theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 561 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ABS, BIO 560 or MAT 561 |
| MAT | 570 | Real Analysis I | Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 571 | Real Analysis II | Continuation of Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 570 |
| MAT | 572 | Complex Analysis I | Analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 573 | Complex Analysis II | Continuation of analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 572 |
| MAT | 574 | Theory of Ordinary Differential Equations | Systems, existence proofs, singularities, asymptotic behavior of solutions, boundedness of solutions, eigenvalues and eigenfunctions, and perturbation theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 578 | Functional Analysis I | Locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 579 | Functional Analysis II | Continuation of locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 578 |
| MAT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MAT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: Mathematics Placement Test |
| MAT | | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Mathematics Placement Test |
| MAT | | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | College of Letters & Sciences | College of Letters and Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-5 | | |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 0-5 | | |
| MAT | | Brief Calculus | Differential and integral calculus of elementary functions with applications. Not open to students with credit in MAT 260 or 270 or 290. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 (or 119, 170 or 171) with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210, 251, 265 or 270 |
| MAT | | Brief Calculus | Differential and integral calculus of elementary functions with applications. Not open to students with credit in MAT 260 or 270 or 290. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 (or 119, 170 or 171) with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210, 251, 265 or 270 |
| MAT | | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |

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| MAT | | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210, 251, 260, or 270 |
| MAT | | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher. Credit is allowed for only MAT 265 or MAT 270 |
| MAT | | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |
| MAT | | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions, strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |
| MAT | | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |

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| MAT | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): minimum 45 hours |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| MAT | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MBB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 245 | Principles of Molecular and Cellular Biology I | Introduces molecular biology, genetic engineering, gene expression/control and evolution, in the context of cellular and organismal physiology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Pre-requisites: CHM 113 with C or better; Pre/Co-requisite: CHM 116 (with C or better if completed) |
| MBB | 247 | Principles of Molecular and Cellular Biology II | Introduces cell biology, metabolism and regulation, bioenergetics, and protein translocation in the context of cellular and organismal physiology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MBB 245 (or BIO 181) with C or better |
| MBB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisites: MBB 347 or BIO 340 with a C or better; Credit is allowed for only BIO 343 or MBB 343 |
| MBB | 347 | Molecular Genetics: From Genes to Proteins | Emphasizes molecular and cell biology and gene technology, both at the basic and applied research levels, in the growing areas of biotechnology and the molecular biosciences; focuses on molecular processes that allow genetic information to be expressed and regulated and by introducing applications to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisite: BIO 282 (or BIO 181 and 182); CHM 116. Credit is allowed for only BIO 340 or MBB 347 |
| MBB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MBB 247 or BIO 340 with C or better; Credit is allowed for only MBB or PLB 350 |
| MBB | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 or STP 231 or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPI 480 or MBB 355. |
| MBB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MBB | 444 | Techniques in Functional Genomics | Practical introduction to modern functional genomics techniques, including microarray analysis and DNA sequencing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 440 or MBB 440 (with C or better if completed) |
| MBB | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles: plasmid construction, purification, and characterization; PCR; mutagenesis; hybridization and sequence analysis; protein quantitation, immunologic detection, and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 340 with C or better; MIC 302 or MBB 247 with C or better; Credit is allowed for only MIC or MBB 445 |
| MBB | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques; plasmid construction, purification, and characterization; PCR; mutagenesis; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB or MIC 446 |
| MBB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Minimum 3.3 GPA; Molecular Biology student |
| MBB | 490 | Capstone: Issues in Biotechnology | Integrates science and biotechnology industry issues dealing with intellectual property, regulatory issues, business practices, and commercialization. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: BIO 340 or MBB 347 with C or better |
| MBB | 491 | Capstone: Issues in Molecular Biosciences | Integrates molecular science and societal issues dealing with ethics, regulatory issues, and societal needs that pertain to molecular biosciences. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: MBB 490 with C or better |
| MBB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MBB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MBB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| MBB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |

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| MBB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Minimum 3.0 GPA; Molecular Bioscience/Biotechnology student |
| MBB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MCB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 501 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 504, MCB 504, or BIO 598 (Bioimaging Current Techniques); Credit is allowed for only BIO or MCB 503 |
| MCB | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| MCB | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Credit is allowed for only ASM, BIO or MCB 506 |
| MCB | 540 | Functional Genomics | Functional relevance of genomic sequences; DNA arrays, proteomics, analysis of genomic information for metabolic physiology of organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MCB | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MCB or NEU 555 |
| MCB | 556 | Advanced Molecular and Cellular Biology II | Continuation of MCB 555. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| MCB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 701 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MCB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| MCE | 230 | Understanding the Culturally Diverse Child | Surveys cultural and linguistic diversity in American education, including education equity, pluralism, learning styles, and roles of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Credit is allowed for only MCE 230 or TEL 212 |
| MCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 447 | Diversity in Families and Communities in Multicultural Settings | Diversity and the changing role of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| MCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| MCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| MCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| MCE | 548 | Multicultural Perspectives on Teaching and Learning | Facilitates understanding of key components related to cultural diversity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| MCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics; highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCO | 120 | Media and Society | Role of newspapers, magazines, radio, television, and motion pictures in American society. Designed for nonmajors. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Credit is allowed for only JMC 110, MCO 110 or 120 |
| MCO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-3 | | |
| MCO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 200 | Introduction to Electronic Media | Surveys electronic media in the United States: history, regulation, organization, programming, and effects. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | |
| MCO | 240 | Media Issues in American Pop Culture | Examines the production and consumption of popular culture as disseminated by the mass media with emphasis on the societal implications. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | |
| MCO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 302 | Media Research Methods | Surveys research methods used in the social sciences, with a focus on mass communication. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major with minimum cumulative 2.50 GPA OR nonmajor with minimum cumulative 2.00 GPA OR graduate Mass Communications major OR ASU Online student with minimum cumulative 2.00 GPA |
| MCO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 418 | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 420 | Strategic Sports Communication | Covers the wide-ranging field of strategic sports communication. Prepares students for an entry-level position in the strategic sports communication field. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication or W. P. Carey major; minimum 45 hours |
| MCO | 421 | Media Problems | Trends and problems of the mass media, emphasizing editorial decisions in the processing of information. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 425 | Digital Media Literacy | Helps students begin to navigate the 21st-century media, starting by becoming active users of media, not just passive consumers. The Internet-fueled democratization of media creation has enabled anyone to be a publisher, and given audiences' almost infinite choices, with both great and questionable effects. In a world of information abundance, it can be difficult to discern fact from opinion and truth from fiction. We need to know how to wade through this barrage of information with a critical eye, to be better informed, and ultimately become creators of media ourselves. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism & Mass Communication major; minimum 2.50 GPA OR non-Journalism & Mass Communication major; min 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate MCO major. Credit for only MCO 425 or MCO 494 (Digital Media Literacy) |
| MCO | 430 | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 435 | Social Media | Explores and critically analyzes the social, cultural, legal, ethical, economic, and technological dimensions of social media tools from Facebook to Foursquare, Twitter to Flickr and beyond. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 440 | Applied Media Research | Design, conduct, and analysis of applied media research. Students participate in the Cactus State Poll. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s):JMC 301 with C or better; Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |

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| MCO | 450 | Visual Communication | Theory and tradition of communication through the visual media with emphasis on the continuity of traditions common to modern visual media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | HU | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 455 | War and Mass Media | Provides a better understanding of the role and impact of the mass media in shaping public perceptions about one of humanity's most monumental undertakings, the act of war. Through a combination of lectures, readings, documentaries, and motion pictures, examines and critically analyzes media portrayals, real and fictional, of issues, events, and the changing dynamic among: the government, the military, and public opinion as shaped by the media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate, and image creation. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 460 | Race, Gender, and Media | Readings seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | C | Prerequisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |
| MCO | 465 | Sports and Media | Designed for aspiring journalists and media users, explores why great sports journalism is essential to our society. Establishes the goals, dreams, and expectations for sports journalism and introduces ethical philosophy and popular ethical models and decision-making tools. Students then apply these tools to sports journalism. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 473 | Sex, Love, and Romance in the Mass Media | The role of the mass media in constructing and/or reinforcing unrealistic mythic and stereotypic images of sex, love, and romance. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | |
| MCO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MCO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 498 | Pro Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | |
| MCO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 501 | Newsriting and Reporting | Designed for graduate students in the MMC program who have undergraduate degrees in nonjournalism areas. Objective is to teach fundamentals of writing and reporting. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 502 | Journalism Skills | Teaches basic journalism skills including print, broadcast, and online. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 8 | | Pre-requisite: Master of Mass Communication student; Credit is allowed for only MCO 502 or 591 (Journalism Skills) |
| MCO | 503 | Media Law | Examines philosophical and legal aspects of press freedom. Emphasizes First Amendment theory evolution from 1791 to present. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 505 | Depth Reporting | Introduces strategies for writing in-depth newspaper or magazine articles. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 510 | Media Research Methods | Professional approach to online and library research, getting and using public records, and investigative journalism techniques. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 515 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 520 | Mass Communication Theories and Process | Analyzes various theoretic models of mass communication with emphasis on the applications of these theories to various professional communication needs. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 522 | Mass Media and Society | Mass media as social institutions, particularly interaction with government and public. Emphasizes criticism and normative statements. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 525 | 21st-Century Media Organization and Entrepreneurship | Focuses on the future of journalism, the future of journalism business organizations and entrepreneurship, new media experiences, online solutions to popular media problems, financial realities of the media, and media innovation. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication student |

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| MCO | 530 | History, Philosophy, and Ethics of Journalism | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 531 | Advanced Broadcast Reporting | News and information practices of networks, stations, and industry. Practice in writing, reporting, and editing with emphasis on video. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 532 | Foundations in Mass Communication Research | Designed for students who have not had a course in academic research. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Masters of Mass Communication and Journalism and Mass Communication PhD students |
| MCO | 535 | Latino and Transnational Issues | Explores Latino communities and U.S.-Mexico transnational issues. Students can move on to the Carnegie-Knight News21 initiative in which they develop sophisticated multimedia reporting projects. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Masters of Mass Communication student; Credit is allowed for only MCO 535 or 598 (Latino and Transnational Issues) |
| MCO | 536 | Public Relations Research Methods | Understands the importance of research in communication strategy. Identifies different types of research and understands how they are used in public relations practice. Understands and critically evaluates published academic and professional research. Locates and uses secondary sources to help develop suitable research questions and support findings. Provides experience conducting research using both qualitative and quantitative methods; analyzing data to reach robust conclusions, interpret findings and understand implications within a specific communication context. Practice writing research reports. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Master of Mass Communication major. Credit is allowed for only MCO 536 or 598 (PR Research) |
| MCO | 550 | Issues in Coverage of Business and the Economy | This seminar course focuses on the critical study of business and economic coverage in all media, with emphasis on quality, clarity and differences. Students will be assigned specific companies and economic issues to follow throughout the semester and will work on a final project appropriate to their personal journalism career goals. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): graduate online student OR Masters of Mass Communication major |
| MCO | 551 | Better Business Storytelling | Examines the best practices for business storytelling and equips students with the tools necessary to produce compelling in-depth financial stories. Identifies quality story ideas and methods for cultivating and interviewing sources. Sharpens various advanced reporting and writing techniques, including scene building and character construction, needed to execute narrative business stories and other high-level journalistic pieces. Gains skills needed to develop a reporting plan, structure stories effectively and produce vivid writing. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 552 | Data in Business Journalism | Uses Excel and public databases, ratios in financial statements and 990s; localizes economic indicators; researches stocks, bonds, derivatives, currencies and commodities; uses the Bloomberg terminal and creates simple data visualizations. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 553 | Reporting on Business and the Economy | Trains students in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication major; MCO 502; Credit is allowed for only MCO 553 or 598 (Reporting on Business and the Economy) |
| MCO | 554 | Investigative Business Journalism | Business stories—or stories with strong business angles—have dominated the Pulitzer Prize for Investigative Reporting in recent years. Business is fertile territory for investigative reporting. Offers a grounding in how to produce investigative business journalism. Topics include identifying and researching an investigative business story; using public records, including SEC documents, and databases; cultivating sources and getting people to talk to you; organizing and bulletproofing your story; and producing a detailed pitch memo. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 555 | Digital Media Entrepreneurship | Covers the experience of identifying a marketable idea and transforming it into a product and a company. Covers concepts of entrepreneurship including the fast-paced—and ambiguous, sometimes chaotic—kinds of “scalable” enterprises often associated with Silicon Valley. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): graduate Mass Communication major. Credit is allowed for only JMC 455, JMC 494 (Digital Media Entrepreneurship), MCO 555, or MCO 598 (Digital Media Entrepreneurship) |
| MCO | 560 | Arizona Media Law | Case study approach to first amendment issues, media access, libel, confidentiality, and invasion of privacy as applied to media organizations in Arizona | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 570 | Master of Mass Communication Capstone | Master's degree hands-on culminating experience. Students may specialize in the various areas, i.e. print, broadcast, online, digital media, or public relations. | Y | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Pre-requisite: Masters of Mass Communication student |

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| MCO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 710 | Research Methodology in Mass Communication | Identifies research problems in mass communication and provides an overview of questionnaire construction as well as attention to survey, historical, content analysis, experimental and legal research methods. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism Mass Communication PHD students |
| MCO | 711 | Critical, Historical, Legal Research Methods in Mass Communication | Critical, legal and historical methods necessary to conduct qualitative mass communication research. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PHD student |
| MCO | 712 | Freedom of Expression Theory | Examines philosophical and legal aspects of press freedom; emphasizes First Amendment theory evolution from 1791 to present. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PHD student |
| MCO | 720 | Mass Communication Theory | Analyzes various theoretic models of mass communication with emphasis on the applications of these theories to professional communication. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 722 | Philosophy of Mass Communication | Mass media as social institutions, particularly interaction with government and public; emphasizes criticism and normative statements. Seminar. Prerequisite: Journalism and Mass Communication PhD student. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 755 | Research Apprenticeship | Students and faculty work on a research project with the expected outcome of a scholarly publication. | N | RSC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication PHD student |
| MCO | 765 | Teaching Apprenticeship | Assists PhD students with the transition from the industry to the classroom in order to become better university instructors. | N | REC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-2 | | Pre-requisites: Journalism and Mass Communication PHD student |
| MCO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | | Media and Society | Role of newspapers, magazines, radio, television, and motion pictures in American society. Designed for nonmajors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only JMC 110, MCO 110 or 120 |
| MCO | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MCO | | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MDC | 211 | Introduction to Digital Sound | Examines how technology is used as listeners, creators, critics, remixers, and a wide variety of other roles to participate in and gain a deeper understanding of music and its role in our lives. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for MDC 211 or MUE 294 Open Minds, Digital Ears |
| MDC | 311 | Composing and Performing for Hybrid Ensembles | Provides opportunities to perform music in a variety of digital and hybrid contexts using both physical and digital instruments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only MDC 311 or MUE 394 (Performing in Digital and Hybrid Music Groups) |
| MDC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MDC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |

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| MDC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MDL | 410 | Laboratory Leadership | Clinical lab leadership and management. Applies the principles of personnel management and supervision, allocation of resources, and staff communication. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite: Admission to Medical Laboratory Science program |
| MDL | 420 | Advanced Clinical Urinalysis and Body Fluids | Theory and applications of principles in urinalysis with emphasis on the etiology, pathophysiology, and clinical manifestations of renal and other metabolic defects as reflected by the analysis of urine and other body fluids. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 421 | Advanced Practicum in Clinical Urinalysis and Body Fluids | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of urine and body fluids, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 420 with C or better |
| MDL | 430 | Advanced Hematology and Hemostasis | Theory and application of principles in hematology, with emphasis on techniques to evaluate blood dyscrasias and analyze body fluids. Etiology, pathophysiology, clinical manifestations, and treatment of blood dyscrasias/hemostatic defects. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 431 | Advanced Practicum in Hematology and Hemostasis | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of blood samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| MDL | 440 | Advanced Immunohematology and Immunology | Theoretical and practical application of clinical immunology and immunohematology. Emphasizes serological techniques that aid disease diagnosis and blood donor selection. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; MIC 205; Admission to Medical Laboratory Science program |
| MDL | 441 | Advanced Practicum in Immunohematology and Immunology | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 440 with C or better |
| MDL | 450 | Advanced Clinical Microbiology | Theoretical and practical application of clinical microbiology. Emphasizes identification of pathogenic organisms, molecular techniques, mycology, virology, and parasitology. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 451 | Advanced Practicum: Clinical Microbiology | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 450 with C or better |
| MDL | 460 | Advanced Clinical Chemistry | Theoretical and practical applications of clinical chemistry with particular emphasis on correlation of test results to disease status, statistical analysis, pre-analytical testing, critical values, calibration, and trending and tracking of quality control results. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 461 | Advanced Practicum: Clinical Chemistry | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis routinely used clinical chemistry testing. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: MDL 460 with C or better |
| MDL | 470 | Research Paper | Focuses on the creation of a research paper, written in a scientific fashion, on a relevant topic in the clinical laboratory field. | N | RSC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 460 |
| MDL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| MED | 100 | Introduction to Medical Studies | Presents basic concepts related to sciences, social sciences, humanities, statistics and other topics related to medical and health studies. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | |
| MED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 417 | Impact of Violence on Health | Approaches violence from a public health perspective, using the Centers for Disease Control, National Center for Injury Prevention and Control, as a benchmark. Applies an interprofessional approach to violence, to include medicine, nursing, law, law enforcement, social work, psychology, economics and education, among others. Discusses principles of epidemiology, underlying etiologies and sequelae and evidence-based strategies for prevention throughout the course. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours |
| MED | 445 | Science of Helping in Health | One of the strongest weapons in the health care arsenal is helping people make healthier lifestyle choices. But this weapon is only effective when it results in sustained behavior change. Explores the complex interactions among genetics, biology, psychology and society that drive lifestyle choices and the science surrounding motivation and compliance in facilitating behavioral change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours |
| MED | 450 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: HCD 100; Credit is allowed for only HCD 301 or MED 450 |
| MED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| MED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |

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| MED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| MED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 322 | Structural Mechanics | Three-dimensional stress and strain analysis, generalized Hooke's Law, failure theories for ductile and brittle materials, combined loading, stress concentrations, energy methods, mechanical vibrations and structural dynamics, fatigue. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical Engineering BSE student; MAE 213 and 384 with C or better; MAT 267 or 272 with C or better; Credit is allowed for only AEE 325 (or MAE 325), MEE 322, or MAE 394 (Structural Materials in Aerospace) |
| MEE | 323 | Computer-Aided Engineering II | Introduces finite-element analysis, pre- and postprocessing, solving problems with FEA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2 | | Prerequisite(s) with C or better: BSE Aerospace Engineering major; AEE 325 (or MAE 325 or 394 Aerospace Structures and Materials); MAE 214 or BSE Mechanical Engineering major; MAE 214; MEE 322 (MAE 322) |
| MEE | 340 | Thermofluids II | Intermediate concepts of thermodynamics, fluid mechanics, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; Pre- or corequisite(s): MAE 384 |
| MEE | 342 | Principles of Mechanical Design | The design process: conceptual and embodiment design of mechanical elements; form synthesis; material selection, failure modes, manufacturability tolerances, common mechanisms and machine elements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 322 with C or better; MSE 250 with C or better; Pre- or corequisite(s): MAE 318 and MEE 323 with C or better if completed |
| MEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 434 | Internal Combustion Engines | Performance characteristics, combustion, carburetion and fuel-injection, and the cooling and control of internal combustion engines. Computer modeling. | N | LEL | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 340 or MEE 482 with C or better; Credit is allowed for only MEE 434 or MAE 598 (Internal Combustion Engines) |
| MEE | 446 | Energy Systems Design | Applies mechanical engineering principles and techniques to modeling, analysis, and synthesis of energy systems and components. Design optimization. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s) with C or better: MAE 400; MEE 340, 482; BSE Mechanical Engineering (Energy and Environment) major |
| MEE | 482 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics, property relationships, power and refrigeration cycles, and reactive systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; Credit is allowed for only MAE 382 or MAE 570 or MAE 598 (Thermodynamics) or MEE 482 |
| MEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| MEE | 488 | Mechanical Engineering Design I | Conceptual and embodiment design; modeling; rapid prototyping. Team project. MEE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Mechanical Engineering major. MAE 318, 384; MEE 340, 342 with C or better; Pre- or corequisite(s): MAE 400 with C or better if completed |
| MEE | 489 | Mechanical Engineering Design II | Detail design; fabrication and testing. Team project. MAE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 488 with C or better |
| MEE | 491 | Experimental Mechanical Engineering | Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better; MEE 340 with C or better |
| MEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| MEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| MET | 150 | Introduction to Engineering Technology | Introduces mechanical, manufacturing, and aeronautical engineering technology. Covers aspects of the industries utilizing these majors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 211 | Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. May be repeated for credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre/Co-requisites: PHY 121 (or PHY 111 as pre-requisite); MAT 265 or MAT 270 |
| MET | 212 | Applied Engineering Mechanics: Dynamics | Masses; motion kinematics; dynamics of machinery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 211 (or CON 221 or MAE 212); MAT 266 (or MAT 271) |
| MET | 213 | Applied Mechanics of Materials | Stress, strain, stress-strain relations. Axial, shear, bending, torsional and combined loads and deflections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 211 or CEE 210, or MAE 212 |
| MET | 214 | Applied Mechanics of Materials Laboratory | Measurements of loads and deformations relating stress and strain in axial, shear, bending, torsional, and combined loading configurations. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: MET 213, MAE 213, MSE 211, CON 223, CEE 213 OR be co-enrolled in MET 213 |
| MET | 230 | Introduction to Engineering Materials | Introduces materials and their properties, emphasizing basic concepts and structures and how these properties relate to manufacturing and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| MET | 231 | Manufacturing Processes | Design documentation and material processes on plastics, ferrous and nonferrous materials, emphasizing orthographic projection, geometric dimensioning and tolerances. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 160 and MET 230 |
| MET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 300 | Applied Material Science | Principles of materials science emphasizing concepts relevant to design, manufacturing, and use. Covers metals, polymers, ceramics, and composites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR MSE 250 OR Applied Science (Manufacturing Technology & Management) major; MET 230 |
| MET | 302 | Welding Survey | Theory and application of industrial welding processes; introductory welding metallurgy and weldment design; SMAW, GTAW, GMAW, oxyacetylene, and brazing experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Fulton Schools of Engineering graduate student |
| MET | 309 | Nondestructive Testing and Quality Assurance | Part and material inspection using metrology and nondestructive inspection tools and techniques. Theory and application with use of pertinent standards. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 321 | Introduction to Automotive Engineering | Engineering principles and the design of ground vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 212; MET 213. Corequisite: MET 340 |
| MET | 331 | Machine Design I | Applies mechanics to design of machine elements and structures. Stress analysis, failure modes, tolerances, cylindrical fits, and shaft design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 213 (or CON 223 or MAE 213) |
| MET | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables, Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: PHY 112 or PHY 131; MAT 266 or MAT 271; Credit is allowed for only EGR or MET 340 |
| MET | 341 | Manufacturing Analysis | Organizational and functional requirements for effective production. Analysis of industrial specifications, geometric dimensioning and tolerancing, costs, and group technology. Writing assembly production plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 344 | Casting and Forming Processes | Analyzes various forming processes to determine load requirements necessary for a particular metal-forming operation. Information used to select equipment and design tooling. Metal casting processes and design of castings. Introduces powder metallurgy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major; MET 300 (or MSE 250) |
| MET | 345 | Advanced Manufacturing Processes | Material removal processes emphasizing advanced turning, milling, and machinability studies using cutting tools. CNC programming for machining and turning centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 351 | Introduction to Automation | Introduces automation. Topics include assembly techniques, fixed and flexible automation systems, robots, material-handling systems, sensors, and controls. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 210 |
| MET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 396 | Professional Orientation | Topics related to a successful career in engineering technology industry. Includes safety, life-long learning, ethics, and career planning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisite: Junior or Senior standing |
| MET | 400 | Materials and Joining Processes | Effects of joining processes on metals and composites. Thermal cycle effects on solid-state and liquid-solid material transformations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| MET | 401 | Quality Assurance | Statistical quality control methods, design of experiments, sampling, gauge requirements and specifications, use of quality assurance tools. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: STP 420 (or APM 301); Credit is allowed for only MET 401 or 501 |
| MET | 402 | Advanced Material Joining | In-depth analysis of common materials-joining processes and their process parameters. Includes automation, soldering, and adhesive bonding. Lecture, lab. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| MET | 409 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only MET 409 or 509 |
| MET | 410 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 341; Credit is allowed for only MET 410 or 510 |
| MET | 415 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 341; STP 420. Credit is allowed for only MET 415 or 515 |
| MET | 416 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Pre-requisite: MET 341; Credit is allowed for only MET 416 or 516 |
| MET | 418 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300 or MSE 250. Credit is allowed for only MET 418 or 518 |

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| MET | 421 | Vehicle Powertrains | Internal combustion engine design, performance and operation, and power transmission systems within vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321 |
| MET | 423 | Vehicle Chassis and Running Gear Design | Design and manufacture of chassis, structures, steering and braking systems and components, wheels and tires, suspension systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321; MET 331 |
| MET | 424 | Vehicle Electrical Systems | Vehicle electrical power and signal systems, computer control and analog control systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210; MET 321; MET 421 |
| MET | 426 | Vehicle Thermal Design | Heat management in vehicle systems, including thermal design of engine and transmission cooling systems, cabin heating, and air conditioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 421; Pre/Co-requisite: MET 434 |
| MET | 427 | Vehicle System Integration and Testing | Systems engineering principles, Design of the interfaces between vehicle subsystems. Testing of integrated systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 423; MET 424 |
| MET | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 or MAE 240; Credit is allowed for only EGR or MET 432 |
| MET | 433 | Thermal Power Systems | Analyzes gas power, vapor power, and refrigeration cycles. Components of air conditioning systems. Direct energy conversion. Psychrometry. Analyzes internal combustion engines and fluid machines. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisites: MET 432 OR Fulton Polytechnic School graduate student |
| MET | 434 | Engineering Thermo-Fluids III | Transient conduction, convection and radiation heat transfer, heat exchangers, thermo-fluid systems engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 435 | Alternate Energy Sources | Alternate energy systems, energy use and its impact on the environment, and demonstrating practical alternative energy sources to fossil fuels. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 436 | Turbomachinery Design | Applies thermodynamics and fluid mechanics to the analysis of machinery design and power cycle performance predictions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MET 432 OR Fulton Schools of Engineering graduate student |
| MET | 437 | Design for Materials Joining | Uses design principles to analyze structures and determine appropriate weld/braze/solder or adhesive joint size. Uses welding codes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300 |
| MET | 438 | Machine Design II | Applies mechanics to the design of machine elements and structures. Emphasizes basics of gears, springs, brakes, clutches, and bearings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MET 331 OR Fulton Schools of Engineering graduate student |
| MET | 440 | Finite Element Analysis | Analyzes machine elements, frames, and aerospace structures employing finite element analysis and software. Includes sensitivity analysis and estimating accuracy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 331 |
| MET | 442 | Specialized Production Processes | Nontraditional manufacturing processes, emphasizing EDM, ECM, ECG, CM, PM, HERF, EBW, and LBW. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 (or EGR 294 [Engineering Materials & Manufacturing] or MET 231). Credit is allowed for only MET 442 or MET 502 |
| MET | 443 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 345; Credit is allowed for only MET 443 or 514 |
| MET | 444 | Production Tooling | Design and fabrication of jigs, fixtures, and special industrial tooling related to manufacturing methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): MET 309. Credit is allowed for only MET 444 or MET 504 |
| MET | 455 | Automation Systems Integration | Applies sensors and devices and their integration with PLCs and computers into automated devices and systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 351 |
| MET | 460 | Capstone Project I | Group project designing, evaluating, and analyzing components, assemblies, and systems. Develop products/manufacturing techniques demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300; 331; 340; 345 |
| MET | 461 | Capstone Project II | Small-group projects applying manufacturing techniques, with emphasis on demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 460 |
| MET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| MET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 501 | Statistical Quality Control Applications | SPC problem-solving techniques for implementation in industrial setting; design and analysis of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 401 or 501 |
| MET | 502 | Specialized Production Processes | Specialized production processes including lasers, electronic beam, abrasive and water jet, and chemical and thermal processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 442 or 502 |
| MET | 504 | Applications of Production Tooling | Design and fabrication of fixtures, jigs, templates, and specialized industrial tooling for manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 444 or 504 |
| MET | 507 | Lean Manufacturing Process Improvement | Study and use of the enterprise level improvement strategy known as Lean Manufacturing via a variety of lean manufacturing tools and methodologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Fulton Schools of Engineering graduate student |

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|---------|----------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MET | 509 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; credit is allowed for only MET 409 or 509 |
| MET | 510 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 410 or 510 |
| MET | 513 | Advanced Automation | Analysis and design of hard and flexible automation systems. Particular attention to material-handling technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Fulton Schools of Engineering student; Minimum Senior Standing |
| MET | 514 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 443 or 514 |
| MET | 515 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 415 or 515 |
| MET | 516 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 416 or 516 |
| MET | 518 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 418 or 518 |
| MET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | | Manufacturing Analysis | Organizational and functional requirements for effective production. Analysis of industrial specifications, geometric dimensioning and tolerancing, costs, and group technology. Writing assembly production plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | | Capstone Project II | Small-group projects applying manufacturing techniques, with emphasis on demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 460 |
| MET | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MGT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | |
| MGT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 290 | My Life Venture | Interdisciplinary course that engages students in aspects of self-discovery and entrepreneurship. Students learn about themselves, their decisions, and their goals, and see how entrepreneurship could play a role in their lives. Introduces students to concepts in entrepreneurship and personal finance in the context of not-for-profit, business, political, and artistic realms. Includes both individual and team activities and is open to any ASU student. | N | LEL | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Credit is allowed for only MGT 290 or MGT 294 (My Life Venture) or WPC 294 (My Life Venture) |
| MGT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 300 | Organization and Management Leadership | Analyzes strategic, behavioral, and human resource management perspectives, including principles of strategic management and leadership of human resources. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s) with C or better: ACC 241, 240, 242 or Z71; EGN 221, 231; IEE 380 or STP 280; MAT 211, 265 or 271; WP Carey BA or BS, Engineering Management, Secondary Education (Business) major or Business minor |
| MGT | 301 | Principles of Management | Introduces the theoretical and practical foundations of organizations with a focus on individuals, groups, and organizational systems. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: School of Global Management and Leadership student. |

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| MGT | 302 | Principles of International Business | Multidisciplinary analysis of international economic and financial environment. Operations of multinational firms and their interaction with home and host societies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: W. P. Carey BS or BA student (or non-business student with minimum 2.5 GPA and minimum 56 hours); ECN 212 or 214 with C or better; Credit is allowed for only AGB 302 or MGT 302 or BUA 394 Perspectives in Global Business |
| MGT | 303 | Honors Organizational Strategies, Leadership, and Behavior | Overview of business strategy principles, management processes, motivation, and leadership | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; PGS 101 or PGS 304 or SOC 101 or SOC 301, and ECN 221 or ECN 231, and ACC 241 or ACC 242 or ACC 271 with C or better |
| MGT | 310 | Collaborative Team Skills | Development of skills in managing and working in collaborative environments. Theories and applications in small group dynamics and team facilitation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student OR Non-business student with min 3.5 ASU cum GPA and min 56 earned hours. |
| MGT | 320 | Organizational Behavior | Management processes, fundamentals of business-level strategy, individual difference issues, motivation and leadership of people in organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites with C or better: ACC 241 (or ACC 242 or 271); ECN 221 (or ECN 231); MGT 300 (or MGT 303); PSY 101 (or PGS 101) or PSY 304 (or PGS 304) or SOC 101 (or SOC 301); BS Business Entrepreneurship or Management major |
| MGT | 340 | Creativity and Innovation | Teaches key concepts and useful tools and techniques of creativity and innovation to students in order to encourage development of creative skills and habits that can propel them in their career or guide them down a path to start a new venture of their own. Coursework and activities involve complex problem solving activities and relevant trend and environmental analysis in order to explore alternative approaches to challenges. Coursework includes both individual and team activities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | L or HU | Pre-requisite: W. P. Carey BS or BA student OR non-business student with min 2.50 ASU cum GPA and min 56 earned hours and Pre/Co-requisite: MGT 290 or 294 My Life Venture; Credit is allowed for only MGT 340 or MGT or WPC 394 (Creativity and Innovation) |
| MGT | 350 | Seminar in International Business | Broad exposure to global business; cross-cultural differences across business disciplines; European Union history and future; impact of exchange rates. | N | PRA | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; SCM 300 with C or better, OR Non-business student with min 2.0 ASU cum GPA and 56 earned hrs and MGT 380 with C or better |
| MGT | 360 | Entrepreneurship and Value Creation | In-depth application of entrepreneurial concepts including opportunity recognition, value creation, and new business management. Students learn how to identify the needs of a market and problem solve to meet those needs through innovation. Students learn common mistakes made in the new venture process and how to work to avoid these mistakes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W. P. Carey BA or BS, or Sec Ed Bus, and ACC 240, 241 or 242 with C or better; OR non-bus with min 2.5 ASU Cum GPA, 56 hours, MGT 290 or 294 My Life Venture; Credit is allowed for only MGT 394 Intro to Entrprnshp OR MGT 360 |
| MGT | 380 | Management and Strategy for Nonmajors | Introduces the functions and applications of management in organizations, including controlling, decision making, leadership, motivation, planning, and social responsibility. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| MGT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W. P. Carey BS or BA student; Pre/Co-requisite: ACC 240 or ACC 241 or ACC 242 or ACC 271 with C or better |
| MGT | 400 | Cross-Cultural Management | Cultural role in international business relations; applied principles of cross-cultural communications, negotiations, and management; regional approaches to business relations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | C & G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better. |
| MGT | 410 | Responsible Management | Values, core beliefs, legal and ethical mandates and cultural norms as they apply to the conduct of organizations; application through a Service Learning project. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student, or non-business student with minimum 3.5 gpa and minimum 56 hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 411 | Leading Organizations | Comprehensive overview of leadership in organizations. Provides students with understanding of leadership research and its applications to global organizations and the development of leaders. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student or non-business student with minimum 2.50 ASU cum GPA and minimum 56 earned hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 412 | Managing Human Resources | Overview of domestic and global human resources management topics pertinent to managers and first-line supervisors, as well as those with interest in human resources management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Global Business/Ldrshp Mngt or Global Business/Human Resource student with conditional or professional status, must not have earned credit for HRM 410, AND completed MGT 301 with a grade of C or greater. |
| MGT | 420 | Human Resource Management | Development of skills and knowledge to lead associates effectively; hiring, developing, evaluating, retaining, and rewarding employees. Preparation for leadership roles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 3.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better |
| MGT | 421 | Compensation in Organizations | Develops knowledge of theory and research in motivation, compensation and rewards, and skill in applying such knowledge to important compensation and reward decisions. Discusses strategic compensation and reward systems issues. Explores in detail a variety of monetary and nonmonetary reward systems; the motivational impact these systems have on employees, teams, and CEOs; and the performance impact they have on organizations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 422 | Staffing | Focuses on the effective management of the flow of talent into and through organizations. Covers human resource planning, recruiting and selection, career transitions and other workforce movement. Provides opportunities to develop hands-on skills that are relevant to effectively managing talent flow. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 423 | Training and Development in Organizations | Familiarizes students with the training and development function in organizations. Although tailored to students interested in human resources management, the course may also be relevant to students who may at some point be involved in training and development within an organizational context. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |

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| MGT | 424 | Employment Law | Provides an overview of U.S. employment law at both the federal and state levels. Reviews employment at will and wrongful discharge, employment torts, privacy, discrimination law, worker's compensation, occupational safety and health, unemployment, federal compensation laws, and the law of noncompetition and trade secrets. Designed for individuals preparing for careers in human resource management, labor relations or dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 425 | Global Human Resources | Explores the importance of international business management in the context of international human resource management, including topics on culture, compensation and benefits, international organizations and their structures, international assignment management and the legal and regulatory considerations that global organizations face. Identifies differences in operating a domestic versus international business and how business practices need to be adapted to operate successfully in foreign markets. Covers global strategy and structure; understanding and managing cultural differences; design and alignment of global HRM practices; and the global HR function. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 430 | Negotiations | Improves student's understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. Give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. Emphasizes experiential learning--students spend most of their time participating in exercises and negotiation simulations, as well as discussing negotiation-based cases involving issues that often arise in the workplace. Provides a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: MGT 300 or 303 or 310 with C or better; W.P. Carey BS or BA student or non-business student with minimum 3.00 ASU cum GPA and minimum 56 earned hrs; Students with credit for MGT 494 topic 187 may not take MGT 430 |
| MGT | 440 | Entrepreneurship | Prepares students for the challenges of assembling and growing high-potential innovative ventures through the use of analytical frameworks that encompass uncertainty inherent in entrepreneurship (or in entrepreneurial activity). In-depth discussion of cases provides a strong empirical foundation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; FIN 300, 302 or 303 with C or better; MGT 300, 310 or 303 with C or better |
| MGT | 445 | Business Plan Development | Develops a complete strategic business plan emphasizing the planning process undertaken by successful small business owners and entrepreneurs. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; MGT 440 with C or better |
| MGT | 446 | Venture Capital Experience | Students learn the details of the startup funding process and available resources. Exposes the history of venture capital and other types of capital, current trends, and the trends that are anticipated in the future. Students learn due diligence process as performed by investors and applies these concepts to building and growing their own ventures. Coursework includes both individual and team activities and is open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: W. P. Carey BA or BS student; ACC 240, 241 or 242 with C or better OR Non-business student with minimum 2.50 GPA, Minimum 56 hours, Credit is allowed for only MGT 446 or 494 (Venture Capital Experience) |
| MGT | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR non-Business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| MGT | 450 | Consulting Projects | Describes and analyzes business processes. Generates and evaluates alternatives. Creates improvement and implementation plans. | N | PRA | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Pre-requisites: W.P. Carey BS or BA student; ENG 301 or 302 with C or better; MGT 300 or 303 with C or better; MKT 300, 302 or 303 with C or better; Pre- or Co-requisite: FIN 300, 302 or 303 (with C or better if completed) |
| MGT | 459 | International Management | Concepts and practices of multinational and foreign firms. Objectives, strategies, policies, and organizational structures for operating in various environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 302 or ECN 306 with C or better |
| MGT | 460 | Strategic Management | Systems theory of organizations, strategy formulation and administration in organizations, creating organizational cohesiveness, and leading change within organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Pre-requisites: W.P. Carey Management BS student; MGT 303 or 320 with C or better; MGT 410 or 411 with C or better; FIN 300, 302 or 303 with C or better; MKT 300, 302 or 303 with C or better |
| MGT | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Pre-requisites: Department approval; Application process; Credit is allowed for only IND, GRA or MGT 464 |
| MGT | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Pre-requisites: Department approval; application process |
| MGT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: W.P. Carey Management BS student. |
| MGT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| MGT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey BS or BA student OR non-Business with min 2.5 ASU cum GPA, min 2.5 ASU bus GPA and min 56 earned hrs; MGT 300 or 302 or 303 or 310 or IBS 300 with C or better |
| MGT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-7 | | Pre-requisites: W.P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W.P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 502 | Organization Theory and Behavior | Understands human side of organizations through management theories and applications. Develops knowledge and skills for successful management of self and others. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: Specific W.P. Carey students |
| MGT | 503 | Human Resources Management: Principles and Skills | Emphasizes strategies for managing human resources and implementing HRM programs and policies that make people more productive and satisfied. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: Applied Leadership & Management graduate student |
| MGT | 504 | Ethics and Corporate Social Responsibility | Reviews practical and conceptual tools to deal with the ethical implications of a variety of types of managerial decisions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: Applied Leadership & Management graduate student |
| MGT | 505 | Leadership and the Knowledge Economy | Examines organizational processes that seek synergies between the information processing capacity of IT and the creative capacity of humans. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: Applied Leadership & Management graduate student |
| MGT | 512 | Professional Relationship Management | Explores theories, methods, skills, and practices central to development of professional-level expertise in the management of relationships in the workplace. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: School of Global Management and Leadership graduate student in either the Accountancy & Applied Leadership graduate plan or the Applied Leadership & Management graduate plan. |
| MGT | 513 | Leadership Skills and Principles | Provides an overview of different perspectives and approaches to leadership practice. The overall goal of this course is to enhance students' leadership skills and to develop a plan for developing these skills in the future. The specific learning goals for this course include the following: (1) to gain an understanding of traditional and emerging leadership models and practices; (2) to improve the leadership skills of giving feedback, setting goals, and providing recognition; (3) to explain the role of vision in leadership and to create a personal vision statement; (4) to raise awareness about the methods and approaches used by organizations to develop leadership competencies; (5) to gain insights regarding effective and ineffective leadership through case analyses; and (6) to increase self awareness about leadership competencies by preparing a leadership development plan. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W. P. Carey Graduate student |
| MGT | 514 | Entrepreneurial Leaders | Applies leadership concepts to entrepreneurial processes. Considers independent entrepreneurs, as well as intrapreneurs within organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Applied Leadership & Management graduate plan; MGT 513 with C or better |
| MGT | 515 | The Neuroscience of Leadership | Provides a rigorous understanding of how the human brain supports leaders in thought, perception, decision-making, affect, action, and social processes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: School of Global Mgt & Leadership graduate student in Acct & Applied Leadership or Applied Leadership & Mgt. Applied Leadership & Mgt students must have completed MGT 502, 503, 504, and 505 with C or better |
| MGT | 520 | High-Impact Leadership | Addresses the inherent ambiguity surrounding effective leadership by providing a toolkit of tangible behaviors to ensure leaders create "high impact" in all areas of their professional and personal lives. Emphasizes what high-impact leaders do differently and uniquely to achieve results while also inspiring loyalty in relationships. Covers core topics including building executive maturity and presence, developing and delivering compelling messages, inspiring those around you, building a strong relationship network, establishing credibility, and managing upward relationships. Includes peer dialogue, extensive presentation skills training, and assignments based on students' real-life leadership experiences. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 520 or 591 (High Impact Leadership) |
| MGT | 523 | Performance Management | Addresses effective management of people in organizations. Considers evaluating and improving performance using concepts and application. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: MBA degree student |
| MGT | 530 | Negotiations | This course is designed to improve students' understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. This course is designed to give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. The emphasis of the course is on experiential learning - students will spend most of their time participating in exercises and negotiation simulations (including negotiating job offers), as well as discussing negotiation-based cases involving issues that often arise in the workplace. The goal is to provide students with a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 530 or 591 (Negotiations) |

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| MGT | 540 | Entrepreneurship | Capstone case-based course covering all aspects of starting a business: opportunity identification, evaluation, concept development, identifying required resources, acquiring those resources, launching the entity, managing growth, and ultimately, harvesting the enterprise. Revolves around a series of cases, readings and class discussions designed to build a comfort level with understanding and solving problems faced every day, in real life, by a broad spectrum of entrepreneurs at various phases of venture development. Significant emphasis on understanding the valuation and financing of entrepreneurial ventures interwoven through discussions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: ACC 502 and FIN 502 with C or better; W.P. Carey School of Business graduate student; Credit is allowed for only MGT 540 or 591 (Entrepreneurship) |
| MGT | 545 | Becoming Leaders Who Matter | Addresses core questions: What does it mean to be a leader who really matters? How can you become such a leader? Today's competitive and complex environment requires leaders who are equipped with not just the functional and technical skills necessary to run a business but, more significantly, the leadership skills that allow the business and the people involved in it to thrive. Provides an opportunity to reexamine thinking about leadership and assess current skills and competencies in this area. Highly interactive learning environment with case analyses, exercises, discussion, guided reflection activities, assessments and group work. Covers topics such as self awareness (motivations, values, and leadership style), developing perspective as leaders, the social context of leadership, the role of emotions in the workplace, using life experiences to extract leadership lessons. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 545 or 594 (Leading w/Authenticity & EI OR Becoming Leaders Who Matter) |
| MGT | 550 | Toxic Leadership and Dysfunctional Organizations | Examines origins and impact of bad behavior in the workplace. Identifies and investigates dysfunctional organizational policies and toxic leadership practices. Case studies and consultation reports provide students with detailed accounts of destructive leaders motivated by or responding to greed, questionable ethics, organizational and marketplace pressures, crisis and psychopathology. Students learn best practices for early detection of toxic leadership and organizational dysfunction and strategies for positive intervention and transformation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 550 or 591 (Toxic Leadership and Dysfunctional Organizations) |
| MGT | 559 | International Management | Studies international and cross-cultural influences on management processes and development of global leadership capabilities for experienced management professionals. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W.P. Carey Graduate student |
| MGT | 561 | Advanced Integrated Project | Capstone project of the high-technology ASU MBA. Student teams develop business plans for new technology-based products. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Management | 1-6 | | Pre-requisites: MBA degree student |
| MGT | 565 | Business Strategy and Public Policy | Takes a managerial perspective to examine the interface between businesses and their external political environments. Potential changes in public policy can affect current operations and future opportunities. Examines how managers can anticipate and affect the formation, modification and enforcement of public policy in various institutional environments. | N | LEL | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: W.P. Carey MBA Executive Program or W.P. Carey School of Business Graduate student; Credit is allowed for only MGT 565 or 591 (Business and Public Policy) |
| MGT | 570 | Management Consulting | Develops understanding of how internal and external consultants add value. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 588 | Strategic Leadership | Explores the general manager as organizational leader. Focuses on competitive advantage and how each functional area contributes to it. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: MBA degree student |
| MGT | 589 | Strategic Management | Formulation of strategy and policy in the organization, emphasizing the integration of decisions in the functional areas. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: MBA degree student |
| MGT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Pre-requisites: Graduate W.P. Carey students |
| MGT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: MBA degree student |
| MGT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MGT | 596 | Global Strategic Management Project | Experientially examines the interaction among the strategic forces within an organization with the competitive forces in the global environment. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: School of Global Management and Leadership graduate student in Applied Leadership & Management; MGT 502, 503, 504, and 505 with C or better |
| MGT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| MGT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| MGT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 538 | Innovation and the Individual | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| MHI | 540 | Understanding and Applying Principles of Evidence-Based Practice | Understanding how application of evidence-based practice principles assists healthcare professionals to provide the best care. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to the Masters of Healthcare Innovation |
| MHI | 542 | Systems Thinking in a Complex Environment | Studies basic and advanced systems principles as they relate to the American healthcare system. Specific emphasis is given to system assessment, designing system interventions, and managing system dysfunction from the innovator's perspective. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| MHI | 544 | Innovations in Information Systems | Allows students to develop their own learning goals around the innovative use of technology to: critically appraise and evaluate the use of technology to access information; develop skills in maximizing the use of technology to advance practice, thinking, and decision making; advance the integration of human potential and available technology; and develop strategies to address the competing priorities of technology, confidentiality, safety, high reliability principles, full disclosure to the public, and risk management. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| MHI | 546 | Communication, Technology, and Innovation | Overview of traditional, contemporary and innovative communication strategies in the 21st century. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Master of Healthcare Innovation major |
| MHI | 548 | Advanced Principles and Concepts of Innovation | Explores and analyzes the innovation in complex systems, focusing on developing specific skills for successful innovations. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 550 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy, emphasizing strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 552 | Financing for Innovation | Provides an overview of healthcare economics; develops budgeting, planning, and management skills; and culminates in financial analysis skills necessary to facilitate management decision making or writing business plans or grant proposals. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 554 | Outcomes Evaluation | Outcomes measurement, management, and evaluation for healthcare practitioners and/or leaders. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| MHI | 561 | Innovation Methods | Capstone project to learn the active skills of healthcare innovation using an adapted IDEO model. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| MHI | 562 | Capstone Innovation Project II | Introduces the process of conceptualizing an innovation and building a plan or proposal to move forward with the innovation in either an entrepreneurial or intrapreneurial context. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MHI | 563 | Capstone: Final Innovation Project | Applies the concepts learned in MHI core courses and presents evidence of knowledge in innovation principles, applications and strategies for implementation and evaluation. Develops an innovation project in the form of a mindmap. Provides a comprehensive methodology for completing all aspects of an innovation opportunity. Student-directed demonstrations of the application of learned leadership skills and techniques for facilitating team and individual implementation. | N | SEM | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHI | 679 | Biostatistics: Principles of Statistical Inference. | Examines principles of statistical inference and their application to the analysis and interpretation of epidemiological, psychosocial, medical, nursing, and healthcare data. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| MHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 140 | Music as Culture | Introduces a range of practical and intellectual challenges presented by encounters with various kinds of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisites: Music major |
| MHL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MHL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 201 | Media Literacy for Musicians | Instruction in basic Macintosh computer literacy, including generic applications and music-specific programs with hands-on experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | CS | |
| MHL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 341 | Music History I | Western European art music from Antiquity through Baroque. Identification/analysis through listening; application of historical and analytical concepts; research project comprising fresh thesis, detailed musical research, personal reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major: MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major: MTC 223 with C or better |
| MHL | 342 | Music History II | Western European, American art music from Classical period to present. Identification/analysis through listening; transfer/application of music/analytical concepts; research project comprising fresh thesis, insightful musical research/reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major: MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major: MTC 223 with C or better |
| MHL | 344 | Music in World Cultures | Examines the relations among music, dance, theatre, religion, and social status in Asia, Africa, Oceania, Europe, and the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | |
| MHL | 352 | The Evolution of Jazz | Origin, development, and styles of jazz music and its exponents. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | H | Pre-requisites: Music student; MTC 223 with C or better |
| MHL | 363 | Survey of Russian Music | Examines music and musical life in Russia, the Soviet Union, and the post-Soviet C.I.S. from the Middle Ages to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): Music student; MHL 342 with C or better |
| MHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 438 | Topics in 18th-Century Music | Selected topics exploring the musical styles of the 18th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 439 | Topics in 19th-Century Music | Selected topics exploring the musical styles of the 19th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 440 | Music Since 1900 | Examines stylistic trends, major composers and their works, and cultural contexts in music since 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L or HU | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or greater |
| MHL | 456 | History of Opera | Development of opera from its creation ca. 1600 to present. Emphasis placed on major stylistic developments and representative works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 222 with C or better |
| MHL | 466 | North American Indian Music | Various styles of Indian music in the United States, Canada, and Mexico. Open to Music majors and nonmajors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | (L or HU) & C | |
| MHL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MHL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MHL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MHL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MHL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 532 | Music Bibliography | Major historical and analytical writings; systematic and historical collections of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music student |
| MHL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Graduate Music student |
| MHL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 647 | Topics in American Music | Selected topics in the history of music. Composers working in the Americas with emphasis upon music since 1900. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 657 | Topics in Symphonic Literature | Examines the evolution of the symphony and symphonic poem from the early classic era through the 19th century, with emphasis on the analysis of selected works. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 664 | History of Music Instruments | Surveys the history and development of music instruments in traditional, folk, and art cultures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 668 | Introduction to Ethnomusicology | Experiencing theory and methodology by being ethnomusicologists through musical performance, primary writings on fieldwork, career structuring, the history of the discipline, its relationship with historical musicology, and the cultural theories which ethnomusicologists draw on. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 670 | Area Studies in Ethnomusicology | Study of the music of a particular culture, country, or area (e.g., music of Mexico, Latin America, China, Africa). | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 675 | History of Choral Music | Major choral works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MHL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIC | 205 | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | 206 | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | 220 | Biology of Microorganisms | Introductory microbiology for students majoring in the life sciences. Detailed study of microbial cells, their structure, genetics, physiology, and taxonomy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 or 282; CHM 116 |
| MIC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 302 | Advanced Bacteriology Laboratory | Advanced lab techniques in bacterial growth, physiology, and genetics, with an emphasis on quantitative data and formal lab reports. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |
| MIC | 360 | Bacterial Physiology | Mechanisms and control of cell metabolism, structures, and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 379 | Medical Bacteriology | Principles of medical bacteriology with emphasis on bacterial infections, diagnostic testing, clinical symptoms, pathogenesis, and treatments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 |
| MIC | 380 | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 401 | Research Paper | Paper of 15 or more pages based on library or lab research in collaboration with a faculty member. Required of all Microbiology majors. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Pre-requisite: MIC 302 with C or better |
| MIC | 402 | Service Learning | K-12 tutoring internship; learning activities employed were originally developed as part of the Bio Reach Program. Requires weekly reflective writing. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | C | Pre-requisite: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| MIC | 421 | Experimental Immunology | Introduces the basic techniques, methods, and assays used in immunology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisite: MIC 220, MBB 247, BIO 353 or BIO 360 with C or better |
| MIC | 425 | Advanced Immunology | Surveys recent advances in immunology, including lymphocyte membranes, lymphokines/biochemistry, molecular genetics, theoretical immunology, immunoregulation, neuroimmunology, and immunologic diseases. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420 with C or better |
| MIC | 426 | Medical Immunology | Concepts and clinical applications of medical immunology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 181 (or BIO 188 or MBB 247) and BIO 182 (or BIO 187 or MBB 245) and BIO 353 with C or better |
| MIC | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisite: MIC 420, PSY 325, PSY 425, BIO 353, BIO 462, or BIO 467 with C or better; Credit is allowed for only MIC 427 or PSY 427 |
| MIC | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420, PHI 317, HPS 314, or PHI 428 with C or better; Credit is allowed for only MIC 428 or PHI 428 |
| MIC | 441 | Bacterial Genetics | Surveys genetic exchange and regulatory processes in bacteria and their viruses. Bacteria and viruses as tools in genetic engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; MIC 220 with C or better |
| MIC | 442 | Bacterial Genetics Laboratory | Techniques of mutagenesis, mapping, and strain and genetic library construction. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre/Co-requisite: MIC 441 |

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| MIC | 443 | The Microbial Universe | Diversity and physiology of microorganisms with emphasis on recent advances in the biology of microorganisms of environmental and medical importance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353 (LSC 353) with C or better; Pre/Co-requisite: MIC 444 (LSC 445) (with C or better if completed); Credit is allowed for only MIC 205 or 443 |
| MIC | 444 | The Microbial Universe Laboratory | Techniques used to explore the microbial universe with emphasis on structural, metabolic, genetic, and growth characteristics relevant to the identification and characterization of microorganisms of environmental and medical importance. Not open to students with credit in MIC 206. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: LSC 444 or MIC 443 with C or better or co-enrolled in MIC 443 |
| MIC | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles; plasmid construction, purification, and characterization; PCR; mutagenesis; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 340 with C or better; MIC 302 or MBB 247 with C or better; Credit is allowed for only MBB 445 or MIC 445 |
| MIC | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques; plasmid construction, purification, and characterization; PCR; mutagenesis; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB 446 or MIC 446 |
| MIC | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and metals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| MIC | 470 | Bacterial Diversity and Systematics | Biology, classification, and enrichment culture of the nonpathogenic bacteria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MIC 302 with C or better |
| MIC | 475 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| MIC | 481 | Bacterial Pathogenesis | Human host-bacterial interactions in infectious diseases with emphasis on pathogenesis and molecular mechanisms of bacterial virulence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better; MIC 360 or MIC 441 with C or better |
| MIC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| MIC | 485 | General Virology | Fundamental principles of viruses, their molecular biology, replication, genetics, and pathogenesis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| MIC | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |
| MIC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| MIC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| MIC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EVO or MIC 520 |
| MIC | 527 | Neuroimmunology | Studies the mind's influence on immunity and the immune system's influence on the mind, neuroimmunologic diseases, and the neuroimmunologic circuitry involved. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 585 | Molecular Virology | Selected topics concerning molecular aspects of eukaryotic virus replication and pathogenesis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MIC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics; highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| MIC | | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| MIC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MIS | 101 | Introduction to the Military I | Overview of mission, organization, and structure of the Army and its role in national defense; discussion of current military issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 102 | Introduction to the Military II | Introduces problem-solving methods, critical thinking, decision making, and group cohesion as applied in a military environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 201 | Introduction to Leadership Dynamics I | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 202 | Introduction to Leadership Dynamics II | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 205 | Leader's Training Course | 6-week training program emphasizing practical hands-on skills and leadership development. Taken in lieu of MIS 101, 102, 201, 202. Conducted at Fort Knox, Kentucky. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 301 | Advanced Military Science I | Theory and dynamics of the individual soldier and military units in offensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |
| MIS | 302 | Advanced Military Science II | Theory and dynamics of military units in defensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |

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| MIS | 303 | National Advanced Leadership Camp | 6-week training program emphasizing leadership development and advanced military skills, including tactics, land navigation, and physical training. Conducted at Fort Lewis, Washington. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 401 | Advanced Military Science III | Military legal system; preparation and conduct of military training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 402 | Advanced Military Science IV | Military correspondence; career planning and personal affairs in service; conduct of training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 410 | American Defense Policy I | Evolution, organization, and execution of U.S. national security policy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 412 | American Defense Policy II | Contemporary problems and analytical issues in the formation and implementation of U.S. national security. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-12 | | |
| MIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-7 | | |
| MIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-3 | | |
| MIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Military Science | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-3 | | |
| MKT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | |
| MKT | 300 | Marketing and Business Performance | The dynamic role of marketing within society and organizations. Emphasizes frameworks and analytical tools that ensure customer focus and drive organizational performance. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Marketing W. P. Carey BS or BA or non-business student with minimum 56 hours and minimum 2.5 ASU GPA; ECN 211, 212, or 214 with C or better; Credit is allowed for only MKT 300 or 301 (Fundamentals of Marketing) |
| MKT | 302 | Applied Marketing Management and Leadership | Market planning, execution, and assessment. Emphasizes decision and communication skills related to market opportunity analyses and marketing program development as a core business function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W. P. Carey Marketing BS student; ACC 241, 242 or 271; ECN 221 or 231; AND MAT 211 with C or better |
| MKT | 303 | Honors Marketing Theory and Practice | Covers basic applications of marketing concepts to problems that are common to marketing managers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W. P. Carey School of Business Honors student; ACC 241, 242 or 271 with C or better; ECN 221 or ECN 231 with C or better; Credit is allowed for only MKT 300, 302 or 303 |
| MKT | 311 | Sports Administration | Focuses attention on components ranging from professional sports to collegiate sports, as well as sports-related products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey BA major; Minimum 2.50 ASU cumulative GPA; Minimum 56 hours; MKT 300 with C or better |
| MKT | 352 | Marketing Research | Knowledge and skills to make intelligent decisions in the design, evaluation and application of marketing research and market data. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W. P. Carey Marketing student; MKT 302 or MKT 303 with C or better |
| MKT | 360 | Seminar in International Business | Broad exposure to global business and cross-cultural differences. Emphasizes the European Union history and future and the impact of financial issues on marketing practices. Lecture, discussion, group work. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey BS or BA student OR Non-business student with min 2.5 ASU cum GPA and min 56 earned hours; SCM 300 with C or better |
| MKT | 365 | Advertising Management | Advertising as a communications tool in marketing and business. Consideration of market segmentation and positioning, creative strategy, media management, and metrics of effectiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BS student; MKT 300, 302 or 303 with C or better |
| MKT | 370 | Professional Sales and Relationship Management | Investigate the vital role of sales, its relationship to other functions within the firm, and its impact on customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 300 or 302 or 303 with C or better; W.P. Carey BA or BS major, or non-business major with minimum 2.50 ASU GPA and minimum 2.50 ASU business GPA and minimum 56 hours |
| MKT | 390 | Essentials of Marketing | Focuses on the nature and processes of marketing with an emphasis on practical application. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business student; Minimum ASU cumulative GPA of 2.00; Minimum 56 hours OR Non-degree OR be a Graduate student (degree seeking or nondegree seeking) |
| MKT | 391 | Essentials of Selling | Focuses on the selling process and its practical applications within consumer and business markets. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |

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| MKT | 392 | Essentials of Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 393 | Essentials of Applied International Marketing | Travel to companies outside the United States to benchmark and assess cross-cultural marketing practices. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Marketing student; Minimum ASU cumulative GPA of 2.00; Minimum 56 hours OR be a Non-degree seeking student OR be a Graduate student |
| MKT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): Non-business student, and minimum cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |
| MKT | 395 | Essentials of Advertising and Marketing Communication | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisite: W. P. Carey BA student or non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a Graduate student; Credit is allowed for only BUA 382 or MKT 394 |
| MKT | 396 | Essentials of Services Marketing | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; OR Nondegree-seeking student; OR Graduate student (degree seeking or nondegree seeking) |
| MKT | 397 | Essentials of Global Marketing | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in the student's home country and marketing globally. The rapid adoption of technology has fundamentally changed the dynamics of marketing and created new competitive paradigms that must be understood for firms to be successful. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 398 | Essentials of Sports Business | Introduces the concepts of sports business. Builds knowledge, skills and understanding of the fundamentals of sports business. Develops an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and how they impact sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 402 | Consumer Behavior | Applies behavioral concepts in the analysis of consumer behavior and the use of behavioral analysis in marketing strategy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey Marketing student; MKT 352 with C or better |
| MKT | 410 | Sales Management | Constructive investigation of selling processes, their application in business and consumer contexts, and management of the sales function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey BA or BS major; MKT 300, 302, or 303 with C or better |
| MKT | 415 | Promotion Management | Market positioning and integration of promotional activities and marketing communications of the firm, including advertising, personal selling, public relations, and sales promotion. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisite: W.P. Carey BS or BA student OR Non-business student; Minimum 2.5 ASU cumulative GPA; Minimum 56 hours; MKT 302 or MKT 303 with C or better |
| MKT | 420 | Retail Management | The role of marketing in retailing and retail performance. Challenges and processes of retail management across various institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisite: W.P. Carey BS or BA student OR Non-business student; Minimum 2.5 ASU cum GPA; Minimum 56 hours; MKT 302 or MKT 303 with C or better |
| MKT | 421 | Fan Behavior and Sports Communication | Focuses on what it means to be a consumer in a sports marketing context society and what, as a marketer, you need to know to develop, evaluate and implement effective marketing strategies for fans. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; minimum 2.50 ASU cumulative GPA; minimum 56 earned hours; MKT 300, 302 or 303 with C or better |
| MKT | 425 | Global Marketing Management | Analyzes marketing strategies and practices developed by firms to compete in global markets and adapt to changing international environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | G | Pre-requisites: W. P. Carey BA or BS major; MKT 300, 302, or 303 with C or better |
| MKT | 430 | Sports Business | Builds knowledge, skills, and understanding of sports business; exposure to leading-edge thought, methods, and practices in sports business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BS student; must have completed MKT 300, MKT 302 or MKT 303 with a grade of C or better. |
| MKT | 431 | Sports Facility Operations | Project-based course that encompasses the administration, coordination and evaluation of any type of event related to sports. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BA or BS major; Minimum 2.50 ASU cumulative GPA; Minimum 56 earned hours; MKT 300 (or 302 or 303) with C or better |
| MKT | 435 | Entrepreneurial Marketing | Identifies and evaluates marketing opportunities; motivates an appreciation of entrepreneurial marketing and its different environmental contexts for general marketing principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BA or BS student; MKT 300, MKT 302, or MKT 303 with grade of C or better. |
| MKT | 440 | Digital Marketing in Practice | Puts digital marketing into practice, expanding on the foundations learned from other marketing courses. Covers strategy and planning but focuses on practical application. Designed to jump start the learning process for any student interested in marketing goods and services in contemporary society. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 440 or 494 (Digital Marketing in Practice) |
| MKT | 441 | Sports Relationship Management | Focuses on selling and how to create, maintain and build relationships within the sports context. Students gain knowledge and develop skills in choosing a sales career including attributes of a sales person, sales call preparation, value propositions, creating value for the client, team selling, questioning and listening techniques, negotiating, persuasion and closing techniques. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; minimum 2.50 ASU cumulative GPA; minimum 56 earned hours; MKT 300, 302 or 303 with C or better |
| MKT | 442 | Services Marketing Strategy | Concepts, skills, and strategies for addressing the imperative marketing challenges and opportunities involving service. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing major; Minimum 2.50 GPA; Minimum 56 earned hours; MKT 302 or MKT 303 AND MKT 352 with C or better; Pre/Co-requisite: MKT 402 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MKT | 450 | Social Media and Content Marketing | Centers on how to effectively use social media and content marketing to build relationships between a company and its customers. Students learn to create content, how to deliver content through social media and community management, as well as how to optimize content for maximum effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 450 or 494 (Social Media Mktg and Com Mgmt) |
| MKT | 452 | Business-to-Business Marketing Strategy | Concepts, skills, and strategies for performing competitively in the business market where organizations rather than households are the customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 302 (or MKT 303), 352 with C or better; W.P. Carey Marketing major with minimum 2.50 ASU GPA, minimum 2.50 ASU business GPA and minimum 56 hours. Pre- or corequisite(s): MKT 402 |
| MKT | 455 | Brand Management | Focuses on understanding brand management and the concepts associated with building brand equity and managing brand identity and positioning. Students learn how firms create a competitive advantage by incorporating consumer insight into an effective branding strategy. In addition, students gain an understanding of the role of branding on product portfolio management. Heavily features case discussion, projects and real brands. Applies brand management knowledge to an actual branding strategy project for a small firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 455 or 494 (Brand Management) |
| MKT | 460 | Sports Revenue Generation | Focuses on providing a sophisticated understanding of revenue generation in the context of sports. Students gain knowledge of key marketing, management and administrative functions that play a critical role in revenue-generation strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BS major; MKT 300 (or 302 or 303) with C or better |
| MKT | 462 | Competitive Marketing Strategy | Strategy formulation and decision making by the marketing executive. Integrates marketing programs and considers competitive marketing issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing student; MKT 302 or (MKT 303 and MKT 352) with C or better; Pre/Co-requisite: MKT 402. |
| MKT | 465 | Projects in Sports Business | Focuses on providing students with an innovative opportunity to work directly with sports business industry professionals to address real-world and real-time issues faced by these organizations. Students develop an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and of their constantly changing and interactive impact on sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BS major; MKT 300 (or 302 or 303) with C or better |
| MKT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W. P. Carey BA or BS student pursuing the Professional Sales Certificate; MKT 300 (or 302 or 303) with C or better |
| MKT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |
| MKT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MKT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W. P. Carey BS or BA student; MKT 300 (or 302 or 303) with C or better |
| MKT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | IND | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |
| MKT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-7 | L | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |
| MKT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-3 | | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |
| MKT | 502 | Marketing Management | Managing the marketing function; market and environmental analysis; marketing planning, strategy, and control concepts. Development and management of marketing programs. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: Specific W.P. Carey Graduate students only |
| MKT | 510 | Understanding Buyer Behavior | Examines behavioral science concepts and theories from the perspective of a marketing researcher who needs knowledge of customer behavior to aid marketing managers as they develop, evaluate, and implement effective marketing strategies for new and existing products. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 520 | Services Marketing and Management | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 525 | Excel in Services | Focuses on challenges of managing services and delivering quality service to customers. The attraction, retention, and building of strong customer relationships through quality service (and services) are at the heart of the course content. The course is equally applicable to organizations whose core product is service and to organizations that depend on services for competitive. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 530 | Creativity and Innovation | Multidisciplinary approaches to theories and practices of inspiring and managing innovation and change for sustainable competitive advantage. Focuses on both the student's individual creativity and the planning and implementation of innovations, technologies, processes, or systems that pose significant uncertainty. Places special attention on the processes surrounding understanding the consumer, ideation and implementation. Inclusive in this are methods such as environmental scanning, scenario planning, contextual research, storytelling, concept testing and prototyping. Also includes the many aspects of the organization's structure and culture regarding innovation and creativity. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 535 | Global Marketing Strategy | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in a home country and marketing globally. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 540 | Consumer Markets and Brand Strategy | Provides an intensive examination of factors that drive consumer behavior. Covers topics such as understanding factors contributing to a superior value proposition, identifying elements associated with the stability of the existing alternative, specifying components linked to reducing the level of uncertainty associated with the new alternative; articulating independent influences (e.g., regulatory and social) operating in a particular change context, and comprehending biases that exist in the search and decision making process. Also places additional emphasis on brand development as well as on the role that social media assumes in the change process. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 545 | Entrepreneurial Marketing | Introduces the process of developing a plan for starting a business and presenting that plan to potential investors in order to obtain financing. Covers the purposes of a business plan, the varying objectives of different types of investors or financial institutions, and how they complement or conflict with the interests of an entrepreneur. Topics include proprietary positioning, types of organization, and differing management objectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 550 | New Product and Service Development | Intimately familiarizes students with the front end of the new product design process and provides concrete tools for determining strategies for developing new products based on input from customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 555 | Business-to-Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments, and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 560 | Customer Relationship Management | Focuses on the tools, metrics, and systems used to measure and manage customer relationships. Key to the development and use of sound customer metrics are market research skills including competencies in research design, sampling, measurement, data collection, and data analysis. Covers how to use types of data such as surveys, purchased data, transactional data, the Web, and social media to measure and manage customer relationships. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 570 | Advanced Marketing Strategy | Covers strategic marketing concepts (portfolio management and resource allocation, market segmentation and positioning, competitive advantage); marketing tools (perceptual mapping, conjoint analysis, portfolio analysis, regression); and market and competitive analysis (analyze changes in market attractiveness, evaluate different courses of action, plan long term). | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W. P. CAREY MBA Full Time student. |
| MKT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: Global Management Graduate student; MKT 502 with C or better |
| MKT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| MKT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| MKT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| MLS | 501 | Writing about Social Issues: Culture, Gender, Society, and Well-Being in the Southwest | Reading and discussion of nonfiction writing on social issues that integrate cultural, gender, and societal issues that affect the well-being of urban communities with special attention to the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 502 | Religion, Culture, and Health: Where Cultures Intersect | Focuses on how cultural and religious notions may come into conflict around issues of health. Contrasts two societies, not necessarily contemporary, from different continents. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 503 | Ethics, Science, and Culture | Introduces ethics related to the practice of art, science, and medical practice in modern and premodern society. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student OR MAS in American Media and Popular Culture student. Credit is allowed for only FMS or MLS 504 |
| MLS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |

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| MLS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Master of Liberal Studies student |
| MPH | 510 | Health Policy and Management | Provides (1) an overview of the U.S. healthcare delivery system and the policies that have shaped it and (2) a foundation in organizational theory and design concepts to support improved system performance. Identifies the dynamics of an organization in terms of its power and political structures, applies creative problem-solving methods, and effectively implements change. Emphasizes the interpersonal and leadership skills required to be effective advocates for public health. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Graduate student |
| MPH | 520 | Principles of Epidemiology | Presents concepts and methods of the science of epidemiology. Introduces concepts important for design and interpretation of epidemiological studies. Critical selection, calculation and interpretation measures of disease frequency and effect appropriate for different study designs. Also introduces important concepts, including confounding, interaction, modeling, and methodological bias. Includes hands-on exercises in evaluation of epidemiologic data and critical review of studies in the current medical and scientific literature germane to urban and mental health issues. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: MPH 579; MPH 551 |
| MPH | 530 | Social and Behavioral Determinants of Health | Analyzes the major social variables that influence population health (e.g., poverty, social class, gender, race, family, community, work, behavioral risks, and coping resources) as well as the major theories of health behavior. Provides the knowledge and skills needed to diagnose/understand community, individual, and organizational health behaviors and change processes, especially in cross-cultural settings. Provides a theoretical foundation for planning culturally appropriate public health interventions/programs in the context of the social and ecological models of health behavior. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Master of Public Health |
| MPH | 551 | Biostatistics II | Covers more advanced statistical concepts, including multiple linear regression, elementary nonparametric techniques, simple contingency table analyses, binary dependent variable models, and survival analysis. Places more emphasis on students' ability to synthesize information and draw conclusions from results. Requires a basic knowledge of SAS programming. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: MPH 550 with B- or better |
| MPH | 579 | Biostatistics I | Common descriptive and inferential techniques employed in public health, including graphical and numerical descriptive statistics; elementary probability calculation; point and confidence interval estimation and hypothesis testing for population means, proportions, differences between means and differences between proportions; association and linear regression. Emphasizes interpretation and concepts. Introduces the statistical software, SAS, as a programming tool to accomplish many of these tasks. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Master of Public Health or MS in Clinical Research Management major |
| MPH | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| MPH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MSE | 100 | Introduction of Materials Engineering | Engineering design process, concepts about materials, and the materials engineering profession, including teaming, computer models, communication, and societal impact. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 2 | | Pre-requisites: Undergraduate Engineering or University College student |
| MSE | 111 | Challenges in Materials Engineering | Introduces current issues and concepts of materials engineering, relationship between materials properties, application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| MSE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| MSE | 211 | Introduction to Mechanics of Materials | Topics include stress, strain, elasticity, axial loading, torsion, bending, yield criteria, fracture, general energy methods and Castigliano's Theorem. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: PHY 121; PHY 122; MSE 250 with a C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MSE | 215 | Materials Synthesis | Introduces contemporary techniques for synthesizing both traditional and novel materials and the corresponding correlation to synthesized materials properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre/Co-requisite: MSE 250 with C or better if completed |
| MSE | 250 | Structure and Properties of Materials | Basic concepts of material structure and its relation to properties. Application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): CHM 114 or CHM 113 with Pre- or corequisite(s): CHM 116 |
| MSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 301 | Materials and Civilization | Focuses on exploring how materials technology can change people's lives. Traces how societies evolved based on the access to materials and the ability to exploit them and trade them among nations. Studies the role of materials in a variety of contexts such as food, art, warfare, transportation, medicine, information and energy from the Stone Age through the industrial revolution to the modern world. Analyzes the connection between the dramatic developments in civilization and advances in materials through the lens of structure, properties and processing of materials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Minimum Junior standing; Credit is allowed for only MSE 301 or 394 (Materials and Civilization) |
| MSE | 308 | Sensing the World | Project-oriented science course develops critical thinking and technical skill using Internet modules on the five senses. | N | LEL | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Pre-requisite: MSE 208 |
| MSE | 330 | Thermodynamics of Materials | Principles of statistical mechanics, statistical thermodynamics of single crystals, solutions, phase equilibrium, free energy of reactions, free electron theory, and thermodynamics of defects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate or Materials minor student, OR other majors with minimum 3.00 GPA; MSE 250 or ECE 350 |
| MSE | 335 | Materials Kinetics and Processing | Introduces kinetics in processing of materials as illustrated through real-world materials processing examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 330 |
| MSE | 355 | Structure and Defects | Elements of the structure of metals and alloys, measurement of mechanical properties, and optical metallography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 250 with a C or better, Pre- or corequisite(s): MAT 343 OR Fulton Engineering graduate student |
| MSE | 356 | Structures, Properties, and Defects Lab | Lab experiments correlating atomic structure, defects and microstructure of processed metals, ceramics polymers and composites to their mechanical and thermal properties. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 355 |
| MSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 415 | Mathematical and Computer Methods in Materials | Mathematical, computational, and statistical methods and computer programming used to model materials science phenomena and materials engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor, OR other majors with minimum 3.00 GPA; MAT 274 or 275 with C or better; MSE 250 with C or better; Credit is allowed for only MSE 415 or MSE 598 (Math and Comp Mths in Matr's) |
| MSE | 420 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, deformation, and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 OR Fulton Engineering graduate student; Credit is allowed for only MSE 420 or MSE 514 |
| MSE | 421 | Physical Metallurgy Laboratory | Focuses on analysis of microstructure of metals and alloys and includes correlation with mechanical properties to some extent. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 420 |
| MSE | 440 | Mechanical Properties of Solids | Effects of environmental and microstructure variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355; Credit is allowed for only MSE 440 or MSE 516 |
| MSE | 441 | Analysis of Material Failures | Identifies types of failures. Analytical techniques. Fractography, SEM, nondestructive inspection, and metallography. Mechanical and electronic components. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Engineering BS/BSE student or Materials minor; MSE 250 with C or better (or ECE 350); Credit is allowed for only MSE 441 or 512 |
| MSE | 442 | Fatigue, Fracture, and Creep of Materials | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 442 or MSE 494 (Fatigue, Fracture, Creep) or MSE 540 |
| MSE | 450 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; PHY 131; MSE 355; Credit is allowed for only MSE 450 or MSE 510 |
| MSE | 451 | Introduction to Materials Characterization Lab | Lab for materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; Corequisite(s): MSE 450 |
| MSE | 458 | Introduction to Electronic, Magnetic, and Optical Properties | Introduces electrical, optical, and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 415; Credit is allowed for only MSE 458 or MSE 515 or MSE 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 460 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250; Credit is allowed for only MSE 460 or MSE 494 (Nanomater. In Energy Production) or MSE 560 or MSE 598 (Nanomater. In Energy Production) |
| MSE | 470 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 250 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |
| MSE | 471 | Introduction to Ceramics | Principles of structure and property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 |
| MSE | 475 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 475 or MSE 518 or EEE 518 or MAE 518 or CHE 518 |

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| MSE | 476 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 476 or MSE 519 |
| MSE | 482 | Materials Engineering Design | Principles of the design process. Feasibility and optimization. Manufacturing processes, materials selection, failure analysis, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MSE 420 OR Materials minor, Chemistry, Engineering, or Physics major; MSE 355 and 356; minimum 87 hours; Pre- or corequisite(s): MSE 470 and 471 OR Fulton Engineering graduate student |
| MSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| MSE | 490 | Capstone Design Project | For small groups in fundamental or applied aspects of engineering materials; emphasizes experimental problems and design. Research. | N | RSC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MSE 482 |
| MSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate or graduate student |
| MSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE or MSE 501 |
| MSE | 502 | Partial Differential Equations | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE or MSE 502 |
| MSE | 510 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 450 or 510 |
| MSE | 512 | Analysis of Material Failures | Identifies types of failures. Analytical techniques. Fractography, SEM, nondestructive inspection, and metallography. Mechanical and electronic components. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only MSE 441 or MSE 512 |
| MSE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MSE | 514 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, and deformation and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 420 or 514 |
| MSE | 515 | Introduction to Electronic, Magnetic, and Optical Properties | Electrical, optical and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; Credit is allowed for only MSE 515 or 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 516 | Mechanical Properties of Solids | Effects of environmental and microstructural variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MSE 440 or 516 |
| MSE | 517 | Introduction to Ceramics | Principles of structure, property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 519 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 476 or 519 |
| MSE | 523 | Structural and Mechanical Properties of Materials | Designed for first-year PhD students in the School of Materials. Topics include crystallography theory, tensor properties of materials, elasticity, crystal defects, dislocation theory, plasticity, fracture, fatigue, and creep. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 524 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 541 or MSE 524 |

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|---------|----------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MSE | 525 | Physics of Materials | Teaches fundamental concepts of applied physics as related to the solid state. Wave-particle duality and the Schrodinger equation; chemical cohesion, bonds and energy bands in metals and insulators, optical, electronic, and magnetic properties. Requires a basic knowledge of differential equations; linear algebra; and electrical, magnetic, and optical properties of materials. A course in modern physics is highly recommended, but not required. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 526 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 526 or NAN 511 or PHY 511 |
| MSE | 527 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; MSE 526; Credit is allowed for only PHY 482 or PHY 512 or NAN 512 or MSE 527 |
| MSE | 540 | Fracture, Fatigue, and Creep | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MSE 442, 494 (Fatigue, Fracture, Creep) or 540 |
| MSE | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nanobiology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 544 or MSE 544 or NAN 544 or PHY 444 or PHY 544 |
| MSE | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only NAN 546 or MSE 546 or PHY 546 |
| MSE | 548 | Fundamentals of Microelectronics Packaging | Multidisciplinary course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Fulton Engineering student. Credit is allowed for only CHE 518 or EEE 518 or MAE 518 or MSE 475 or MSE 548 |
| MSE | 550 | Advanced Materials Characterization | Analytical instrumentation for characterization of materials; SEM, SIMS, Auger, analytical TEM, and other advanced research techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 552 or NAN 552 or PHY 552 or SEM 552 |
| MSE | 553 | Electron Microscopy Laboratory I | Lab support for MSE 552. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Corequisite(s): MSE 552 or PHY 552; Credit is allowed for only MSE 553 or PHY 553 |
| MSE | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent-beam diffraction, and electron holography. Novel developments and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 554 or PHY 554 |
| MSE | 555 | Electron Microscopy Laboratory II | Lab support for MSE 554. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysis, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| MSE | 561 | Phase Transformations, Kinetics, and Diffusion in Solids | Hetero/homogeneous diffusion-controlled transformations, order-disorder transformations, and shear martensitic) athermal transformations in solids. Courses in advanced thermodynamics and structure and properties of materials are strongly recommended in preparation for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 565 | Structural Materials in Nuclear Power Systems | Provides an overview of reactor systems and discusses the structural materials used in reactor components (e.g., fuel/core, wall/blanket, heat exchanger, and steam turbine materials). Discusses design considerations and materials degradation processes that occur in service. Emphasizes the effect of radiation damage on materials properties. Reviews reactor systems, including fission- (e.g., PWR, LWR, BWR, LMFBR) and fusion-based reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Credit is allowed for only MSE 494 topic 1, MAE 494 topic 24 or MSE 565 |
| MSE | 570 | Polymer Structure and Properties | Relationships between structure and properties of synthetic polymers, including glass transition, molecular relaxations, crystalline state viscoelasticity, morphological characterization, and processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 571 or NAN 571 or PHY 571 |
| MSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student OR Science & Engr of Materials student |
| MSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSI | 601 | Contemporary Topics in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from the arts and other disciplines that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Doctoral Music students |
| MSI | 602 | Current Issues in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from current public policies, events, and popular culture that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Doctoral Music students |
| MSI | 755 | Historical Research in Music | Required for all PhD in Music students. Knowledge and insights related to conducting historical research in music. Includes development of a mini-proposal for a dissertation on the history of music education, or draft of a historical research paper suitable for presentation or publication. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Doctoral Music students |
| MTC | 123 | Beginning Composition | Intended for freshmen and sophomores in the composition concentration. Introduces composing. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Theory and Composition student |
| MTC | 125 | Basic Music Theory | Notation, scales, keys, modes, intervals, chords, basic part writing and composition. Development of related aural skills through sight-singing and dictation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MTC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 221 | Music Theory: 18th Century | Styles, techniques, and idioms of 18th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 125 with C or better |
| MTC | 222 | Music Theory: 19th Century | Styles, techniques, and idioms of 19th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 223 | Music Theory: 20th Century | Styles, techniques, and idioms of 20th-century music; emphasizes innovative treatments of musical elements, analysis, and composition; related aural skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |
| MTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 315 | Modern Arranging I | Analysis of scores and recordings, application of orchestration and four and five-part harmonization techniques frequently used in arranging for the contemporary jazz ensembles and studio orchestra | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUP 236 with C or better |
| MTC | 316 | Modern Arranging II | A continuation of MTC 315, analysis of scores and recordings, application and creation of new arrangements for contemporary jazz ensembles and/or studio orchestra. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite: Bachelor of Music student; MTC 315 with C or better |
| MTC | 320 | Modal Counterpoint | Counterpoint based on 16th-century vocal polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 321 | Tonal Counterpoint | Counterpoint based on 18th-century polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 323 | Composition | Writing music compositions, with emphasis on basic techniques and smaller structures. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Prerequisite(s): MTC 123 with C or better OR BMUS Theory and Composition (Composition) or BMUS Theory and Composition (Theory) major with minimum 55 hours |
| MTC | 327 | Intermediate form and Analysis | Organizing elements in the most important contrapuntal and homophonic musical forms from the Renaissance through the 19th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |
| MTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 422 | Musical Acoustics | Properties of sound and tone. Harmonic series, instruments, the ear, auditorium acoustics, and the reproduction of sound. Assumes a thorough knowledge of musical notation, intervals, scales, and harmony, or 2 years of music theory. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; Passed audition |
| MTC | 425 | Studies in 20th-Century Theory | Continued development of analytical techniques and aural skill, with an examination of theoretical systems applicable to 20th-century music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 428 | Advanced form and Analysis | Organizing principles of the large forms of musical composition in the 19th and 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 429 | Canon and Fugue | Writing of canons and fugues in tonal style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 321 with C or better |
| MTC | 430 | 20th-Century Counterpoint | Counterpoint studies utilizing 20th-century idioms. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 433 | Orchestration | Studies scoring music for full and chamber orchestras; examines individual orchestral instruments (characteristics and performance techniques). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 436 | Electronic Studio Techniques I | The study of computer music systems emphasizing advanced audio synthesis and resynthesis as well as their application to professional compositional environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MTC 223 |
| MTC | 437 | Electronic Studio Techniques II | Principles of digital electronic music systems and their applications in the composition of electronic music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 440 | Jazz Theory and Ear Training | Advanced study of jazz harmonic systems. Daily oral drills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 441 | Jazz Composition | Creative writing in the smaller forms and in the idiom of jazz. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Music student; MTC 440; MUP 236 with C or better |
| MTC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 495 | Final Project | Half recital of compositions or approval of a large-scale composition or a research paper. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 0 | | |
| MTC | 496 | Theory Project | Supervised individual writing project dealing with music theory. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MTC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | |
| MTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MTC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MTC | 516 | Baroque Music | Detailed analysis of selected examples of music from the Baroque period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 517 | Classic Music | Detailed analysis of selected examples of music from the Classic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 518 | Romantic Music | Detailed analysis of selected examples of music from the Romantic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 519 | Late 19th-Early 20th Century Music | Detailed analysis of selected examples of music from the late 19th and early 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 520 | Analytical Techniques | Analytical techniques systematically applied to music. Concentration on structural and compositional procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 523 | Advanced Composition | Advanced music composition, including complex techniques and larger structure. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Graduate Music student |
| MTC | 525 | Pedagogy of Theory | Practices and principles of teaching music theory. Emphasizes most desirable and practical offerings possible. Comparative studies of existing practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 527 | History of Music Theory | Theory from Pythagoras to the 16th century. Need not be taken in sequence with MTC 528. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 528 | History of Music Theory | Theory from the 17th century to the present. Need not be taken in sequence with MTC 527. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 540 | Jazz Theory and Ear Training | Surveys some of the most influential trends in the jazz tradition with in-depth analysis of harmonic systems, linear elements, and compositional strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisite: Graduate Music student |
| MTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 723 | Advanced Composition | Special problems in writing in complex forms and textures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MTC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MTC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 181 | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 earned hours |
| MTE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MTE | 210 | Mentored Tutoring Internship | Introduces math education students to issues of balancing the content of precalculus mathematics with the needs of someone learning it. Addresses core issues, including articulating what is involved in learning the mathematical idea(s); interpreting students' questions; analyzing student thinking and inferring their underlying rationale from a learner-centered perspective; techniques of question-posing, problem-posing, and instructional scaffolding. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Co-requisite: MAT 207 |
| MTE | 250 | Technology and Mathematical Visualization | Uses several software packages for exploring mathematics and for preparing mathematical materials, starting from introductory skills and leading to advanced techniques. Places particular emphasis on using computer software with the aim of visualizing mathematical relationships, structures, and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207, 270, and MTE 210 with C or better |
| MTE | 280 | Investigating Quantity: Number, Operations & Numeration Systems | Investigation of mathematical principles and processes regarding the real number system and its properties develop number sense and qualitative reasoning abilities. Designed to meet the requirements for preservice elementary school teachers. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course |
| MTE | 281 | Investigating Space: Geometry, Measurement, and Visualization | Explores three aspects of geometry: spatial visualization, measurement, and proof. Uses visualization, spatial reasoning, and geometric modeling to solve problems. Provides opportunities for participants (1) to use physical models, technology, and pattern-finding strategies to identify properties of and develop formulas for measuring two- and three-dimensional shapes; and (2) to develop powerful ways of thinking to justify geometric relationships | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course |
| MTE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 301 | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking; multiple conceptions of quantity, variables, constants, and unknowns; inductive, deductive, and analogical reasoning; rate of change and proportional thinking; algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the Professional Program |
| MTE | 320 | Conceptual Foundations of 7-12 Mathematics Curricula and Assessment | Focuses on concepts of mathematics curricula and their relationships to perspectives on learning, instruction, and assessment. Using a variety of participation formats (e.g., individual and small group work, and whole group discussions) and directed activities, participants examine curricular principles underlying the historical development of mathematics curricula and assessment, and current curricula and curricular recommendations and controversies surrounding them. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207; MTE 210 and 250 with C or better |

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| MTE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in mathematics education. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | C | Pre/Co-requisite: MAT 117 or MAT 142 or other course meeting General Studies MA requirement |
| MTE | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| MTE | 430 | The Development of Mathematical Thinking | This capstone course requires students' sustained engagement with, and analysis of, artifacts from research on learning mathematics from instruction. The artifacts include: curricular/instructional task sequences, samples of student work, video-cases showcasing students' involvement in instruction, problem-solving interviews, and teaching experiments. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MTE 320 with C or better |
| MTE | 482 | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | 483 | Mathematics in the Secondary School | Topics in geometry, number theory, algebra, and analysis. Emphasizes unifying principles. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better |
| MTE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 485 | Teaching Standards-Based Middle and High School Mathematics | Detailed exploration of the Common Core State Standards (CCSS) for middle school and high school mathematics. In addition to an in-depth coverage of the CCSS content and practices, students engage with, review and analyze existing instructional task sequences addressing the CCSS. Students also design and construct partial and complete lesson plans to cover specific mathematical content and practices. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 271 or minimum 45 hours; Credit is allowed for only MTE 485 or MTE 494 Adv Mths Tchng Math Sec Schl |
| MTE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| MTE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MTE | 585 | Modern Geometry for Teachers | Euclidean, projective, and non-Euclidean geometries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| MTE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| MTE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |

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| MTE | 605 | Research-based Practices, Pedagogy and Instructional Leadership in Mathematics | Examines research-based practices, pedagogy, and instructional leadership in mathematics classrooms K-8. Emphasizes learning and teaching mathematics for understanding. Featured practices and pedagogy for fostering symbolic thinking include inductive and deductive concept development, problem-based learning, cognitively guided instruction, learning trajectories, and use of physical manipulatives and virtual tools to facilitate mathematical thinking. Mathematics instructional leadership projects emphasize development of mentoring techniques and professional development expertise. Prepares K-6 and 5-9 mathematics teachers as mathematics teacher leaders, specialists, or coaches in middle schools and the elementary grades. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 610 | Number and Operations 2 | Examines different conceptions of number and operations as the study of (1) patterns and relationships of numbers, (2) the meaning of operations, (3) reasoning through estimations and conjectures, (4) structure in the number system, and (5) modeling. Participants develop a deeper sense of numbers and operations as they progress through the K-8 curriculum. Various manipulatives and electronic tools facilitate investigations. Topics include: base systems, composing and decomposing numbers, operational relationships, operational strategies, integer meaning, and rational numbers. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MTE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| MTE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MTE | | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking; multiple conceptions of quantity, variables, constants, and unknowns; inductive, deductive, and analogical reasoning; rate of change and proportional thinking; algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Admission to the Professional Program |
| MTE | | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| MTE | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MUD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| MUD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUE | 101 | The ASU School of Music Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university, the School of Music and the Herberger Institute for Design and the Arts. Covers the music education and music therapy programs in the School of Music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUE 101 or 194 (ASU School of Music Experience for Music Education) |
| MUE | 110 | Introduction to Music Education | Overview of music education and career options. Orientation to student characteristics, teacher roles, teaching qualities, and philosophical and historical foundations. Requires school observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major |
| MUE | 154 | Gesture and Sound | Covers fundamentals of musical leadership through gestures associated with sounds in the performance of music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 161 | Introduction to Music Therapy | Overview of the profession of music therapy and its applications in mental health, rehabilitation, and special education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 211 | Music in Recreation | Materials, methods, and organizational structures appropriate for recreational music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 261 | Music Therapy as a Behavioral Science | Orientation to preclinical experience with emphasis on observation skills, assessment, goal setting, and professional ethics. Requires off-campus observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUE161 with C or better |
| MUE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |

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| MUE | 310 | Music in Early Childhood | Examines music through the lens of the culture(s) of young children, which (though they intersect with adult cultures) are unique, different from adult experiences, and particular to them. Emphasizes the musical content of children's songs as well as the music they hear, and the kinds of musical engagements that are particular to young children. Also emphasizes the uses, functions, and meanings of music for children. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: ENG 102 with C or better; minimum 30 hours |
| MUE | 311 | Music in the Lives of Children and Youth | Examines the role of music in the lives of young people with particular attention to child and youth learning and development (cognitive, social, emotional, personal/identity, musical). Includes examination and critique of music intended for children and youth (e.g., social and gendered meanings), as well as consideration of how music is related to individual and social identity. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: BLE 220, RDG 291, SPE 222 or TEL 215, or minimum 30 hours |
| MUE | 317 | Strings Lab | Students apply educational theory to the development and refinement of specialized skills in string teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 318 | Educational Methods for Cello and String Bass | Students apply educational theory to the development and refinement of specialized skills in string teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 319 | Digital and Hybrid Lab | Provides a foundation for integrating a range of technologies and digital media in music teaching and learning. Encourages critical and creative thinking while considering the possibilities for innovative applications of technology and digital media based upon contemporary curricular, theoretical and pedagogical frameworks. Students demonstrate skills and understanding related to using technology and digital media in the context of musicianship, music teaching and learning. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUE | 327 | Brass Lab | Students apply educational theory to the development and refinement of specialized skills in brass teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 328 | Educational Methods for Trombone, Euphonium, and Tuba | Students apply educational theory to the development and refinement of specialized skills in brass teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview. |
| MUE | 335 | Educational Methods for Guitar | Students apply educational theory to the development and refinement of specialized skills in guitar teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education or therapy interview |
| MUE | 336 | Percussion Lab | Students apply educational theory to the development and refinement of specialized skills in percussion teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 337 | Woodwinds Lab | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 338 | Educational Methods for Double Reed Instruments | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 381 | Music Therapy Research | Statistics and research design appropriate for investigations in music therapy. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L | Pre-requisite: Music Therapy student |
| MUE | 384 | Therapy Preclinical I | Paired students provide music therapy for small groups at a community agency for mentally retarded, geriatric, or physically disabled clients for a minimum of 10 clock hours. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 385 | Therapy Preclinical II | Individual placement in ASU Music Therapy Clinic. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 386 | Therapy Preclinical III | See MUE 385. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 387 | Therapy Preclinical IV | Individual clinical work in a community mental health facility. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 388 | Therapy Preclinical V | See MUE 387. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisites: Music Education or Music Therapy student |
| MUE | 413 | The Art of Teaching Children Music | Methods of instruction, planning, and presentation of appropriate contents in music. For music educators and music therapists. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music student |
| MUE | 415 | The Art of Teaching Contemporary Musicians | Curriculum, student characteristics, and teaching strategies for general music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major |
| MUE | 436 | Percussion Methods for Music Therapy | Provides knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy student |
| MUE | 441 | Psychology of Music | Psychological and physiological aspects of music emphasizing musical behavior, function, perception, and learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 463 | Music Therapy Techniques | Organization, administration, and use of music in rehabilitation with various client populations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 467 with C or better |
| MUE | 465 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; Minimum Junior standing |
| MUE | 467 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 475 | Group Process and Music Therapy | Principles of group process, verbal counseling, professional writing, as related to music therapy practice. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisite: Music Therapy student; MUE 463 (MUE 362) with C or better or Graduate student in Clinical Music Therapy |
| MUE | 476 | Internship in Music Therapy | Full-time, 6-month, off-campus residency in an approved clinical institution. | N | PRA | N | Z1 | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 211 with C or better |
| MUE | 480 | The Art of Teaching Choral Musicians | Methods of instruction, organization, and presentation of appropriate content in choral music classes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 481 | The Art of Teaching Beginning Instrumentalists | Instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |

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| MUE | 482 | The Art of Teaching Advanced Instrumentalists | Advanced instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 485 | String Practicum/Methods | For students preparing to administer a string program and teach strings at the elementary level. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | |
| MUE | 489 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy student; MUE 211 with C or better |
| MUE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUE | 501 | Introduction to Professional Music Therapy | Introduces the profession of music therapy through lecture, active discussion, and observations of clinical sessions. Experiential learning is achieved through music making in peer groups. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy graduate student or Clinical Music Therapy graduate student |
| MUE | 536 | Percussion Methods for Music Therapy | Designed to provide knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM Student |
| MUE | 548 | Introduction to Research in Music Education | Survey of research methods and literature in music education. Focuses on interpretation and evaluation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 549 | Foundations of Music Education | A treatment of historical perspectives, philosophy-aesthetics identified with music education, and learning theories applied to music teaching/learning. Basic research and writing skills appropriate to graduate studies in music education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 550 | Studies in Music Curricula | Scope and sequence of musical experiences. Develops criteria for the evaluation of music curricula. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 551 | Advanced Studies in Elementary School Music | For experienced teachers; organization and content of K-6 general music classes. Emphasizes teaching music reading and ear training to young children. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 552 | Advanced Studies in Secondary General Music | Organization and content of school music classes that are not performance oriented. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 560 | Jazz Pedagogy | Study of pedagogy, repertoire, and technique of instruction in jazz styles, ensemble techniques, and performance practice for school ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 562 | Jazz Rehearsal Techniques | Conducting and rehearsal techniques for school jazz ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 563 | Music Therapy Techniques for Children | Organization, administration, and use of music in rehabilitation with children and adolescents with special needs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM student; MUE 581 with C or better |
| MUE | 564 | Instrumental Music, Advanced Rehearsal Techniques | In-depth analysis of instrumental techniques in preparation for a thorough discussion of band tuning problems and solutions. Discussion of productive conducting and rehearsal techniques for school music teachers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 565 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy Graduate student |
| MUE | 566 | Instrumental Literature and Pedagogy for Schools | Provides an in-depth examination of ensemble music and teaching techniques to instrumental music teachers. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 567 | Professional Practicum I | Students provide music therapy for small groups at a community agency providing services to people who are intellectually disabled, physically disabled, and the elderly. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Therapy graduate student or Clinical Music Therapy graduate student |
| MUE | 568 | Choral Music, Advanced Rehearsal Techniques | Musical and vocal techniques necessary for presentation of choral literature. Analysis and experimentation with psychological, acoustical, and other problems of rehearsal and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 569 | Professional Practicum II | Continuation of MUE 567, Practicum. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Education Graduate student; MUE 567 with C or better |
| MUE | 570 | Choral Literature for Schools | Comprehensive study and analysis of choral music for the high school with special emphasis on octavo literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 571 | Music Therapy Seminar I: Supervision and Administration | Covers health care administrative skills pertinent to music therapy practice, including budgeting, resource allocation, and staff supervision. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 572 | Music Therapy Seminar II with Lab: Advanced Practice in Music | Deepens and broadens knowledge and skills in music therapy clinical practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 573 | Music Therapy Seminar III with Lab: Music Therapy Theory and Philosophy | Explores current theory in music therapy and develops the theoretical basis for the profession. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM Student |

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| MUE | 574 | Music Therapy Music Skills I: Improvisation | Teaches new forms of musical improvisation pertinent to music therapy practice, broadening and deepening existing skills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM Student |
| MUE | 575 | Music Therapy Music Skills II: Accompaniment | Teaches new forms of musical accompaniment pertinent to music therapy practice, broadening and deepening existing skills. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM Student |
| MUE | 579 | Psychology of Music | Nature of musicality and its evaluation. Review of recent research. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 581 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy graduate student or Clinical Music Therapy graduate student |
| MUE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 585 | Vocal Acoustics and Production | In-depth approach to the psychological/physiological workings of the vocal mechanism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 586 | Music Therapy Graduate Clinical Project | Develops clinical- and research-based music therapy skills in selected cognate area. | N | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-6 | | Pre-requisites: MUE 571, 572, 574, and 575 |
| MUE | 589 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM Student |
| MUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 754 | Teacher Education Research and Policy | Reading and discussion of research and policy documents in teacher education with a focus on arts and music teacher preparation. Includes development of a research project or essay suitable for publication or presentation, an abbreviated prospectus for a dissertation, or literature review. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 755 | Historical Research in Music Education | Knowledge and insights related to conducting historical research in music education. Includes development of a mini-proposal for a dissertation on the history of music education. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Doctoral Student in Music Education |
| MUE | 756 | Qualitative Research in Music Teaching and Learning | Studies qualitative research and methods in music education, including readings and discussion, data collection and data analysis. Includes development of an abbreviated prospectus for a qualitative dissertation, or a draft of a qualitative research paper suitable for presentation or publication. Prerequisite: doctoral student in music education. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 757 | Quantitative Research in Music Teaching and Learning | Studies quantitative research and methods in music education, including readings and discussion, data collection, and analysis. Includes development of an abbreviated prospectus for a quantitative dissertation or a draft of a quantitative research paper suitable for presentation or publication. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MUE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUP | 100 | Concert Attendance | 6 semesters required for all music majors. A total of 4 convocations and 6 approved recitals required each semester. | N | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 0 | | |
| MUP | 101 | The ASU School of Music Experience | Orientation to university and School of Music resources and procedures as well as career planning and guidance. Through various course discussions and assignments, music students examine the concept of academic integrity and its potential impact on their future and learn about taking an interdisciplinary perspective. Required for all music majors. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUP 101 or 194 (ASU School of Music Experience) |
| MUP | 111 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 117 | Applied Jazz Improvisation | Principles, methods, and theory of jazz performance and pedagogy. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 121 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 127 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisites: Music students who have passed audition |
| MUP | 131 | Class Piano | 4-semester sequence (with MUP 132, 231, and 232) designed for those with little or no piano experience. Emphasizes keyboard technique, sight reading, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 132 | Class Piano | 4-semester sequence designed for those with little or no piano experience. Emphasizes keyboard technique, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 131 with C or better |
| MUP | 133 | Class Voice | 4-semester sequence (with MUP 134, 233, and 234) open to all students. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 134 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 141 | Jazz Fundamentals | Principles, methods, and theory of jazz performance and pedagogy. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 170 | Music Theatre I | Development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUP | 172 | Music Theatre II | Further development of performance skills for opera and music theater, broadening the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to research and develop characters in order to perform various types of songs and dramatic scenes. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MUP 170 |
| MUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisites: Music students who have passed audition |
| MUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music students who have passed audition |

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| MUP | 209 | Beginning Choral Conducting | Essentials of choral conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 210 | Beginning Instrumental Conducting | Essentials of instrumental conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 217 | Applied Jazz Improvisation | Emphasizes basic jazz literature, chord symbol reading, melodic patterns and concepts, ear training, analysis of improvised solos, and pedagogical issues. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 117 with C or better |
| MUP | 231 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP132 with C or better |
| MUP | 232 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP231 with C or better |
| MUP | 233 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 234 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 235 | Jazz Piano | 2-semester sequence (with MUP 236) designed for jazz keyboard experience. Emphasizes chord symbol reading, simple improvisation, and voicing. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 236 | Jazz Piano | See MUP 235. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 237 | Fretboard Harmony | Scales, chords, harmony, basic improvisation for the guitar. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 250 | Diction for Singers | Use of phonetics in the study of song and opera literature. Language emphasis differs each semester. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 270 | Music Theatre III | Further development of performance skills for music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to develop characters and project various moods and scenarios through song. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 172 |
| MUP | 272 | Music Theatre IV | Further development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students conduct in-depth analyses of characters from both the historical and contemporary repertoire of music theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 270 |
| MUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music students who have passed audition |
| MUP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 301 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 232. Emphasizes accompaniments, ensemble playing, score reading, advanced harmonizations, repertoire, technique, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 232 with C or better |
| MUP | 302 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 301. A sequential continuation of MUP 301 skills that include both group and studio instruction. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP301 with C or better |
| MUP | 311 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 317 | Applied Jazz Improvisation | Emphasizes listening, analysis, and performance of advanced jazz literature and composition in contemporary styles. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 319 | Advanced Audio Engineering in the Arts | Synthesis and application of analog and digital recording methods (voices and instruments), mixing and the advanced skills needed to create professional recordings (CDs, DVDs, internet sound files, etc.). Further emphasis on electronic music production, computer based applications, MIDI, and contemporary studio hardware. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Minimum Junior standing in the Herberger Institute for Design in the Arts |
| MUP | 321 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 327 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Pre-requisites: Music students who have passed audition |
| MUP | 337 | Studio Instruction: Collaborative Piano | Repertoire to be selected from vocal and instrumental literature. 1 hour lesson per week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 339 | Choral Conducting | Elements of choral conducting technique and interpretation. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 209 or MUP 210 |
| MUP | 340 | Instrumental Conducting | Fundamentals of score reading and interpretation of instrumental music. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 210 with C or better |

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| MUP | 363 | Chamber Winds | Rehearsal and performance of advanced literature for chamber winds. 2 hours per week. Performing ensemble. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 370 | Music Theatre V | Development of specific skills for musical-dramatic interpretation and of specific physical theatre skills for the actor. Performance-based class provides an opportunity to connect physically, emotionally and intellectually to the body of the musical theatre actor, and provides an opportunity to explore strong, clear acting choices. Students participate in various movement theories and techniques in class and complete independent performance projects utilizing the body and the body with voice, choosing a song from various categories to workshop and perform. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: MUP 272 |
| MUP | 372 | Music Theatre: Orchestras | Participation in Lyric Opera Theatre productions. Section 1 (Orchestra); Section 2 (Chamber Orchestra); Section 3 (Chamber Ensemble). May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 373 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles); Section 2 (Chorus). May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 374 | Music Theatre: Production | In-depth study of approaches to Technical Music Theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) is followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 385 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 388 | Collaborative Piano | Performance class for collaborative piano majors. Repertoire includes vocal and instrumental selections. Advanced analysis of ensemble techniques, style and performance practice in preparation for graduate study or professional application. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: 4 terms of MUP 127 with C or better |
| MUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 431 | Basketball Band | The primary goal of any ensemble at ASU is personal musical growth. To accomplish that objective the ensemble studies and performs a range of wind band repertoire. During the term, basketball band members participate in assigned basketball games on campus as well as post-season tournament performances for those who qualify. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition; Credit is allowed for only MUP 431 or 494 (Pep Band) |
| MUP | 436 | Sinfonietta | Enhances musical understanding and performance skills of a variety of the symphonic literature. 2 times per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music students who have passed audition |
| MUP | 440 | Keyboard Harmony | Performance-oriented class emphasizing chord progressions, harmonization, figured bass realization, stylistic improvisation, transposition, open score reading, and sight reading. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 442 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. Curriculum accommodates the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |
| MUP | 443 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |
| MUP | 444 | Chamber Orchestra | Students develop and refine their musical and interpersonal skills in the study, synthesis, and performance of selections from the chamber orchestra repertoire. 1-2 times per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 445 | Symphony Orchestra | Students develop and refine their musical and interpersonal skills in the study, synthesis, and performance of a wide range of advanced symphonic repertoire. 3 times per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 448 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 448 or 494 (Classical Style: Performance and Analysis) |
| MUP | 449 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 449 or 494 (Unaccompanied Bach: Performance & Analysis) |

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| MUP | 450 | Choral Union | Large mixed ensemble focuses on the study, synthesis, and performance of major choral masterworks while gaining in-depth understanding of significant choral repertoire and historical ramifications. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 451 | Repertoire | In-depth study of music for performing, involving advanced interpretive and technical concepts from historical, stylistic, and performance-related perspectives. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Completed 4 semesters of 100-level studio instruction |
| MUP | 453 | Song Literature | Early Italian, English, German, and French art song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 454 | Song Literature | American, Russian, Spanish, Scandinavian, and contemporary song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 455 | Men's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of a variety of historically and musically standard male repertoire, within historical context. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 456 | Symphonic Chorale | Symphonic Chorale performs advanced accompanied and a cappella professional literature from all style periods. As ASU's flagship choir, this mixed ensemble refines professional skills and understanding of vocal music within historical context. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 457 | Women's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of historically and musically important repertoire for treble voices. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 460 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music major (bass, cello, viola, violin) who has passed audition |
| MUP | 461 | Marching and Concert Bands | Development of specific professional performing skills through staging of formations and drills for football games and other events (Marching Band); the development of specific professional performing skills for concert settings, with in-depth study of masterpieces of symphonic band literature (Concert Band). An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 465 | Music Theatre VI: Advanced Acting | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: MUP 370; Credit is allowed for only MUP 465 or 494 (Acting for Singers) |
| MUP | 470 | Music Theatre VII: Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: MUP 465; Credit is allowed for only MUP 470, 494 (Musical Theatre Dance) or 566 |
| MUP | 471 | Music Theatre: Workshops | Development of specific skills for musical-dramatic interpretation. Section 1 (Aria Preparation); Section 2 (Broadway I); Section 3 (Broadway II). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite: Music major |
| MUP | 472 | Music Theatre VIII | Development of specific skills and effective practices for musical theatre auditioning and development of specific skills for musical-dramatic interpretation. This is a performance-based class providing an opportunity to explore strong, clear acting choices for the musical theatre performer in a setting with a scene partner or scene partners, requiring the performance of songs, monologues, scenes, and choreography. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: MUP 470 |
| MUP | 476 | New Music Ensemble | In-depth study, synthesis, and performance of classical works written within the last twenty years for small ensemble and for instruments with electronics. Involves discussion and realization of advanced interpretive and technical concepts related to contemporary music. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 479 | Chamber Music Ensembles | Faculty-coached ensembles involving in-depth study and application of specialized, professional skills in performing with two or more players of like or unlike instruments and/or voice. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 481 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 482 | Piano Pedagogy | Continuation of MUP 481 (Piano). Problems and techniques of teaching intermediate to advanced piano students. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Music students who have passed audition |
| MUP | 486 | Jazz Band | Analysis, rehearsal and performance of new, traditional, and Latin literature for jazz ensembles. Development of advanced sight-reading and instrumental doubling skills. 4 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 487 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. May not be taken for audit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 489 | Ethnomusicology Ensembles | Students apply indigenous music theories to actual practice, contextualized in background reading and listening, as they refine their ability to perform orally generated music and sometimes dance traditions. This course is open to non-music majors by audition or consent of instructor. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |

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| MUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 495 | Performance | For candidates of a BM degree in which 1/2 recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Pre-requisites: Music students who have passed audition |
| MUP | 496 | Performance | For candidates of a BM degree in which a full recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Pre-requisites: Music students who have passed audition |
| MUP | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | Pre-requisites: Music students who have passed audition |
| MUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisites: Music students who have passed audition |
| MUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUP | 507 | Group Piano Practicum | Curricula, materials, and teaching techniques for group teaching at the university and community college levels. Observation/supervised teaching in group piano. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 508 | Studio Observation | Weekly observation of studio teaching by various piano faculty. Paper as final requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 509 | Jazz Keyboard Harmony | Emphasizes jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 510 | Jazz Keyboard Harmony | Continuation of emphasis on jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 511 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 517 | Advanced Improvisation | Improvisation techniques within the context of advanced jazz literature. Must be taken in sequence with MUP 518. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 518 | Advanced Improvisation | Continuation of improvisation techniques within the context of advanced jazz literature. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 521 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 527 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour per week. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 540 | Principles of Integrated Conducting | Score preparation and conducting techniques for instrumental music. Concentration on study of historical styles. Required of DMA students in Instrumental Music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: DMA Conducting major |
| MUP | 541 | The Art Song | Seminar on solo song from its beginning to the present day. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 542 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. Graduate students especially need opportunities to hone their skills in a great variety of performance opportunities. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. The curriculum is designed to accommodate the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. Audition required during the first week of classes. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music students who have passed audition |
| MUP | 543 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MUP | 544 | Chamber Orchestra | Important masterpieces from all periods of music are performed throughout the year. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 545 | Symphony Orchestra | Masterpieces of symphony orchestra literature. 3 times per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 546 | Sinfonietta | Symphonic orchestra that presents approximately six concerts annually, performing masterpieces of the classical repertoire. 3 times per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 548 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 548 or 598 (Classical Style: Perf. & Anlys) |
| MUP | 549 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 549 or 598 (Unaccomp Bach Perf & Analysis) |
| MUP | 550 | Choral Union | Open to all students in the university and to interested singers in the community by audition. Preparation and performance of the larger choral works. 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 551 | Repertoire | Literature available for performance in all performing media. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 552 | Chamber Singers | Important masterpieces from all periods of music are performed. May be repeated for credit for a total of 8 hours. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 553 | Symphonic Chorale | 4 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 554 | Major Repertoire, Score Study, and Performance Practice | Conducting course comprising a survey of significant repertoire (encompassing, over multiple semesters, literature from choral, musical theater/opera, orchestral, and wind band genres); an introduction to historical performance practice; and a range of score study techniques. Conducting majors are required to enroll each semester (or as advised) and, subsequently, display a comprehensive historical knowledge of the repertoire and development of ensembles over the past 500 years, demonstrate command of standard performance practices with respect to each historical era, and exhibit a clear understanding of varied methods of score study. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: DMA Conducting major |
| MUP | 555 | Men's Chorus | Rehearsal and performance of music for mixed voices. 3 hours per week. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 557 | Women's Chorus | 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 560 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Graduate Music major who has passed audition |
| MUP | 561 | Marching and Concert Bands | Staging of formations and drills for football games and other events (fall); masterpieces of symphonic band literature (spring). Meets MWF. An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 563 | Chamber Winds | Rehearsal and performance of advanced literature for chamber winds. 4 hours per week. May be repeated for credit. Performing ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 565 | Acting for Singers | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 565 or 598 (Acting for Singers) |
| MUP | 566 | Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 566 or 598 (Musical Theatre: Dance) |
| MUP | 570 | Music Theatre: Techniques | Exercises and improvisations for the singing actor emphasizing body awareness, isolations, and freedom of the vocal and breath mechanisms. Section 1 (Interpretation); Section 2 (Expression); Section 3 (Movement for Singers). Each Section: 3 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 571 | Music Theatre: Workshops | Development of specific skills for the musical-dramatic interpretation. Section 1 (Role Preparation); Section 2 (Styles); Section 3 (Opera Scenes); Section 4 (Musical Comedy); Section 5 (Revue Ensembles). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 572 | Music Theatre: Orchestras | Participation in Lyric Opera Theatre productions. Section 1 (Orchestra); Section 2 (Chamber Orchestra); Section 3 (Chamber Ensemble). | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 573 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles); Section 2 (Chorus). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 574 | Music Theatre: Production | Introduces technical music theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 576 | New Music Ensemble | Rehearsal and performance of music written in the last 20 years. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 579 | Chamber Music Ensembles | String, brass, woodwind, percussion, keyboard, vocal, and mixed ensembles. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUP | 581 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 585 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 586 | Jazz Band | Rehearsal and performance of new, traditional, and Latin literature for jazz bands. 4 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 587 | Ethnomusicology Ensembles | Performance learning experience for the music of various cultures of the world. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 588 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 596 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 597 | Solo Performance | See MUP 596. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 727 | Studio Instruction | Minimum contact of 1 hour per week. May be repeated for credit. Conducting students register for 2 semester hours; all other students register for 4 semester hours. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Doctoral Music major who has passed audition |
| MUP | 751 | Seminar in Piano Literature | In-depth study of selected topics related to the standard piano literature. Requires research paper, bibliography, class presentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |

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| MUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 796 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | N | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUS | 100 | Fundamentals of Music Notation | Provides nonmusic majors with sufficient symbol literacy to begin work in the field of musical learning. Credit not applicable toward any music degree. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUS | 131 | Bach to Bebop | Develops an understanding of the repertoire for the various musical instruments and ensembles throughout the five eras being studied and discernment through listening different genres of music. For the lectures regarding instruments, introduces students to the respective repertoire for the instrument from c. 1700-present with special emphasis on how the use of the instrument developed throughout history or during each era. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for only MUS 131 or 194 (Performance: Bach to Bebop) |
| MUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 210 | The Arts Around Us | Develops the ability to think and create from an arts-rich perspective. In particular, focuses on the arts in the lives of children and youth, arts experiences for children and youth in the community, and one's personal experiences with the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 210 or 294 (The Arts Around Us) |
| MUS | 211 | Dance, Music and Meaning | Explores the fundamental nature of human experience across time and culture through the medium of dance and music using a variety of dance and musical materials including folk dance and music, popular dance and music, and such theatrical forms as ballet and modern dance and the music connected with them. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 211 or 294 (Dance, Music, and Meaning) |
| MUS | 212 | Music, Meaning and Imagination | Explores how music provides ways to make meaning of the world around us and music as a medium for creative thinking and doing. Develops understanding by trying on roles ranging from critics to creators in both individual and group projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 212 or 294 (Music, Meaning and Imagination) |
| MUS | 213 | Critical Thinking in the Arts | Fosters critical thinking abilities in relationship to performing and visual arts. Students learn how to listen to music and view art analytically. Develops and applies knowledge of common elements (within and across art forms) such as form, texture, balance and contrast in order to enhance understanding both of arts processes and products. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 214 | Art, Music and Learning | Offers an integrated introduction to, and examination of, the core structural and formal elements of visual art and music in the context of contemporary experiences and learning process. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 215 | Children, Creativity, Arts | Interdisciplinary exploration of children's creative processes through critical analysis, hands-on participation and personal reflection. Specifically focuses on creative processes in the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 231 | Laughing to Music | Modern-day comedies like Spamalot, Avenue Q, and Glee are part of a comic tradition extending back to the Renaissance. Looks at funny in music from commedia dell'arte to the present. Studies works including the comedies of Mozart, Gilbert and Sullivan, the Marx Brothers, Monty Python, Mel Brooks and many others. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 231 or 294 (Laughing to Music) |

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| MUS | 240 | Listening to Music | Surveys the historical periods of music making in western civilization, the study of which will hopefully create within the student a listener with an appreciation for art music of many periods and provide more enjoyment in the process. Through lectures, presentations, readings, listening examples and video/DVDs, studies music identified as strong examples of the major periods, composers and compositions in the history of music. Students learn and adopt a minimum new language to help express the elements of music they experience and listen to and develop strategies for writing and communicating about what they hear and put words to how they respond to it. Because experiencing music performed live is an integral part of the learning process, students are required to attend concerts outside of class and submit critical reviews of what they hear. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| MUS | 254 | Blues to Heavy Metal | Covers important musicians and trends from the 1930s through the 1970s. Topics include blues, rhythm and blues, rockabilly, doo wop, teen idols, girl groups, dance craze, surf, novelty, soul, Motown, British invasion, art rock, psychedelic rock, hard rock, heavy metal, and early 70s styles. Emphasizes musical instruments and stylistic traits with historical information provided as background. Features listening examples drawn from selected artists and bands including popular songs and rarities, and demonstrations using various musical instruments and techniques. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 254 or 354 (Blues to Heavy Metal) |
| MUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 340 | Music for the Concert Hall, Stage, and Screen | In-depth study of examples from Western art music. Emphasizes aural analysis and synthesis of historical data with musical phenomena. Critiques the canon and its limits in specific instances. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & H | Prerequisite(s): minimum 42 hours |
| MUS | 347 | Jazz in America | In-depth study, analysis and synthesis of examples from the jazz tradition. Includes the application of advanced aural analytic techniques to exemplary jazz musical works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: ENG 102, ENG 105 or ENG 108 with C or better |
| MUS | 349 | Music in America | Current styles of American music including jazz, popular, and folk music. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| MUS | 354 | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): minimum 42 hours |
| MUS | 355 | American Music | In-depth study of current research topics in American music. Engages students in current scholarly debates. Charts the limits of current scholarly methodologies and historical research programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | Prerequisite(s): minimum 42 hours |
| MUS | 356 | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| MUS | 362 | Rap Music and Hip Hop Culture | Examines the history of rap music and hip hop culture from their origins to about 1995, including most, but not all, of the major artists from this period. Explores connections between rap music and other elements of hip hop culture, and challenges students to think critically about rap music and its place in society. Uses listening exercises, demonstrations, and conversations with artists to examine how rappers create meaning in their musical works. Drawing on secondary articles by rap critics and scholars, considers in detail such controversial subjects as censorship, sexism, obscenity, and race politics in America as they relate to rap music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: Minimum 42 hours; Credit is allowed for only MUS 354 (Hip Hop) or 362 |
| MUS | 371 | World Music | Provides an introduction to world music, including traditional and popular styles. Examines specific music genres from Africa, Asia, Europe, and the Americas and explores their historical development, cultural contexts, communicative functions, forms, styles, instruments and musical philosophies. Throughout the semester, considers the interrelationships among musical genres and other art forms (dance, theater, visual arts, and literature) and analyzes how these musics have intersected with the issues of race, class, gender, religion, ritual, politics, social movements and cultural identity. Students learn to hear and discuss significant stylistic elements of selected genres through listening assignments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only MUS 371 or 394 (World Music) |
| MUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 410 | History of Women in Music | Surveys musical achievements of women as well as the historical contexts that shaped and defined their artistic development. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | |
| MUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 42 hours |
| MUS | | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| MUS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| MUS | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| MUS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| NAN | 505 | Nanoscience and Society | Integrates nanoscience and nanotechnology with potential societal issues involved in the students' NAN 593 Applied Projects. Coordinated by the faculty and research staff at the Center for Nanotechnology in Society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 506 | Innovation and IP Management | Intellectual Property (IP) Management in the context of innovation (research, regulations, manufacture, access to markets, and trade) with emphasis on strategies, public-private interface, licensing, and technology transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511, or PHY 481 |
| NAN | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| NAN | 527 | Advanced Electrochemistry | Theoretical and practical considerations for modern electrochemistry, including voltammetry, potentiometry and microelectrode analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 527 or NAN 527 |
| NAN | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| NAN | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |

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| NAN | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| NAN | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, PHY552 or SEM 552 |
| NAN | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| NAN | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| NAN | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |
| NAN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| NAV | 101 | Introduction to Naval Science | Introduction to the customs, traditions, missions, and regulations of the Department of Defense, United States Navy, and United States Marine Corps. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Naval Science | 2 | | |
| NAV | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NAV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NEU | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only MCB 555 or NEU 555 |
| NEU | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| NEU | 558 | Neuroscience Journal Club | Small class emphasizing discussion, presentation by students, and written research papers. | N | SEM | Y | GNA | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| NEU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Interdisciplinary Graduate Program in Neuroscience PhD students |
| NEU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GRD | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NEU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 160 | Voluntary Action and Community Leadership | Introduction to voluntary behavior in American society for students interested in volunteerism, community service, and civic engagement. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |
| NLM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed). Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| NLM | 220 | Introduction to Nonprofit Organizations | Introduces the nonprofit sector and its role in developing the cultural, economic, and social impact in U.S. society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 235 | Leadership and Ethics | Examines ethical questions faced by emerging leaders. Focuses on helping students develop emotional intelligence, current professional issues, and the refinement of a professional philosophy and comprehensive set of competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 300 | Fund Raising and Resource Development | Theory and practice of philanthropy, resource acquisition methods through ethical fund raising, and earned income approaches for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| NLM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142 or higher; NLM 160 (or PRM 120) with C or better; Minimum 2.50 GPA; Minimum 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| NLM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| NLM | 320 | Professional Development Seminar | Professional seminar featuring nonprofit executives; variable topics on leadership and management concerns. Forum for exchange between students and professionals. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: Nonprofit Leadership Alliance (formerly American Humanics) certification program student |
| NLM | 380 | Financial Management for Nonprofit Organizations | Instructs students about nonprofit financial, management, and social accounting; accounting issues specific to nonprofits; budgeting; reporting; and nonprofit analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Nonprofit Leadership and Management major students or Nonprofit Administration minor students or American Humanics Certificate students; NLM 220 with a C or better |
| NLM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| NLM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| NLM | 410 | Social Entrepreneurship | In-depth study of social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or NLM 210; NLM 220. Credit is allowed for only NLM 410 or NLM 562 |
| NLM | 420 | Nonprofit Leadership Alliance Institute | Nonprofit Leadership Alliance Institute for preparation of nonprofit professionals. Requires out-of-state conference. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-2 | | Pre-requisite: Nonprofit Leadership Alliance (formerly American Humanics) certification program students |
| NLM | 430 | Managing Nonprofit Organizations | Analyzes administrative structures, decision making, and program delivery within nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): NLM 220 and 300 with C or better; senior standing |
| NLM | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| NLM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |

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| NLM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| NLM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |
| NLM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NLM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | L | |
| NLM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 510 | The Nonprofit Sector | Provides grounding in scope, function and philosophical foundations of the nonprofit sector in American society, including civic engagement, service delivery, reproduction of values and entrepreneurship. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 520 | Financial and Resource Management | Baseline understanding of key and critical financial management issues and practices for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 525 | Fundraising and Resource Development | Examines fundraising and resource development in philanthropy from the perspective of the nonprofit practitioner. Also examines issues confronting nonprofit organizations related to fundraising and philanthropic purposes in society. Increases students' knowledge and understanding of charitable giving and fundraising—who gives to what, why, and how to raise funds for a cause. Examines a wide range of fundraising methods and tools. Focuses on critical thinking, reflection on practice, collaboration, discussion and writing. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 530 | Program Evaluation and Information Management | Develops skills in several areas, including evaluation, needs assessment, information and data collection, data management and analysis, computer applications, and report writing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 540 | Strategic Human Resources Management | Managing human resources in nonprofit organizations; practices and theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 545 | Volunteer Resource Management | Core topics in effective management of volunteers in carrying out the mission of organizations and ensuring volunteers have good experience with community organizations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only NLM 545 or 598 (Volunteer Resource Management) |
| NLM | 550 | Philanthropy | Examines the role of philanthropy and charitable giving in contemporary American society from perspectives of the nonprofit practitioner, the philanthropist and the general public. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 555 | Strategic Management for Nonprofit Organizations | Evaluates vital areas of strategic management required for effective leadership of nonprofit organizations. Overview of areas of strategic management that help position nonprofit organizations and leaders to address opportunities and challenges to improve operational effectiveness. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 560 | Leadership and Ethics in the Nonprofit Sector | Examines leadership and ethical questions encountered by managers and leaders in the nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 562 | Social Entrepreneurship | Introduces social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 410 or 562 |
| NLM | 565 | Grant Writing Nonprofit Organizations | Provides practical, experiential instruction identifying grant makers, writing proposals, developing budgets, and evaluating grant proposals for the nonprofit sector. Students develop proposals based on actual, identified needs of their partner nonprofit organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only NLM 451, 565 or PRM 451 |
| NLM | 570 | International Non-Governmental Organizations | Increases knowledge and understanding of international non-governmental organizations by examining what these organizations do and how they operate in a cross-cultural context. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| NLM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NLM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| NLM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 605 | Nonprofits, Law and Society | Enhances the legal sensibilities of nonprofit leaders and engaged stakeholders. This necessitates critical in-depth understanding of: (1) legal needs common to all nonprofit organizations, regardless of mission or area of focus such as nonprofit corporation law, tax-exempt status, fiduciary duties and fundraising and lobbying ethics and parameters; (2) commonalities among nonprofit, for-profit and governmental enterprises operating within similar spheres of society, especially the importance of nonprofit organizations' compliance with laws generally applicable to specific subsectors such as contracts, labor and employment, volunteer and premises liability, and intellectual property; and (3) the overall importance and impact of legal structures on nonprofit organizations' abilities to successfully pursue their missions for the benefit of society. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 610 | Executive Leadership and Governance | Examines the multiplicity of roles for executives and board of directors in providing strategic leadership for nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 620 | Capstone: Integrative Seminar | Improves understanding of trends emerging within nonprofits such as leadership, resource development, and social responsibility. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite: Master of Nonprofit Studies major |
| NTR | 100 | Introductory Nutrition | Basic concepts of human nutrition. Recent controversies in nutrition and how food choices affect personal health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 100 or 241 |
| NTR | 142 | Applied Food Principles | Applied scientific principles of food preparation and production. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Nutrition (Dietetics or Food and Nutrition Management or Food and Tourism Management or Human Nutrition or Nutrition Communication) major OR Food and Nutrition Management minor OR Child Nutrition certificate |
| NTR | 150 | Introduction to the Professions in Nutrition and Dietetics | Introduces the professions of nutrition and dietetics; their history, practice, and future; credentials, ethics, and standards of practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| NTR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 241 | Human Nutrition | Principles of human nutrition. Emphasizes nutrient metabolism and the relationships between diet and disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: CHM 101 or 113 |
| NTR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 300 | Computer Applications in Nutrition | Introduces nutrition and food software, including dietary assessment and analysis, food inventory and control, and telecommunications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: NTR 100 or 241 |
| NTR | 320 | History of Human Nutrition | Origins of human nutrition; evolving theories of nutrition and disease; historical role of nutrition in social, military, cultural events. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 340 | Applications in Human Nutrition | Applies nutrient metabolism through case studies and product evaluations; special topics in human nutrition. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BIO 201; NTR 241 |
| NTR | 341 | Introduction to Planning Therapeutic Diets | Cultural, health, and economic aspects of planning therapeutic diets. Assessments of food and diet composition. Reviews common therapeutic diets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 343 | Food Service Purchasing | Introduces purchasing systems, bid processes, receiving and storage procedures, and regulatory agencies involved in the food service industry. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or 241 |
| NTR | 344 | Nutrition Management and Leadership | Organization, administration, management and leadership in the nutrition field within healthcare, food service and other institutions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Prerequisite(s): NTR 100 or NTR 241 |

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| NTR | 345 | Development of Healthy Cuisines | Principles and applications of nutrition, food selection, food preparation and mindful eating in the development of healthy cuisine for wellness, prevention and disease states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 348 | Cultural Aspects of Food | Origins, development, and diversity of food preferences and dietary habits; food patterns and attitudes of global populations and U.S. immigrants. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C & G | Pre-requisites: NTR 100 or 241 |
| NTR | 350 | Nutrition Counseling | Counseling techniques in nutrition; interpersonal and communication skills in clinical and community sites; nutrition education for individuals and populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisites: NTR 341 with C or better or NTR 345 |
| NTR | 351 | Nutrition and Health Communications | Approaches of nutrition and health communications; development of nutrition and health communication materials for selected target audiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisites: NTR 100 or 241 |
| NTR | 353 | The Western Diet: Food, History, and Sustainability | Hybrid course covering political, ethical, social and cultural issues inherent in the U.S. food system. Topics include examination of U.S. food guidance; the food system and food environment; the history of food and farm policy; food security and aspects of sustainability in relation to food system impacts on the health of humans, society and the environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 353 or 394 (The Western Diet: Food, Health, & Sustainability) |
| NTR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 400 | Preprofessional Preparation in Dietetics | Applies academic knowledge in field practicum; aspects of professional development. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Nutrition/Dietetics students; Senior status; NTR 341 with C or better; NTR 440, 441 or 444 with C or better |
| NTR | 401 | Field Experience in Food and Nutrition | Applies academic knowledge in food service management to field practicum; develops practical skills in planning, purchasing, production, management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Food and Nutrition management, Nutrition Communication, or Human Nutrition students; Senior standing; Pre/Co-requisites: NTR 351, 343 or 444 |
| NTR | 440 | Advanced Human Nutrition I | Metabolic reactions and interrelationships of vitamins, minerals, and water. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202 with C or better; NTR 241 with C or better; NTR 340 with C or better; Credit is allowed for only NTR 440 or 540 |
| NTR | 441 | Advanced Human Nutrition II | Metabolic reactions and interrelationships of carbohydrate, lipid, and protein. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BCH 361 with C or better; BIO 202; NTR 241; Credit is allowed for only NTR 441 or 541 |
| NTR | 442 | Experimental Functional Foods | Food product development techniques, food evaluation and testing, and investigation of current research into food composition. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: CHM 101 or CHM 113; NTR 142; NTR 100 or NTR 241 |
| NTR | 444 | Medical Nutrition Therapy | Principles of medical nutrition therapy for prevention and treatment of disease and promotion of health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 341 or FON 341 with C or better OR enrolled in NTR 341; BIO 202; Credit is allowed for only NTR 444 or 544 |
| NTR | 445 | Management of Food Service Systems | Standardized methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or NTR 241; NTR 142; NTR 343; Credit is allowed for only NTR 445 or 545 |
| NTR | 446 | Human Nutrition Assessment Lecture/Laboratory | Clinical and biochemical evaluation of nutritional status. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 444 with C or better; Pre/Co-requisites: BCH 361; Credit is allowed for only NTR 446 or 546 |
| NTR | 448 | Community Nutrition | Food-related behaviors; organization and delivery of nutrition services; program design, implementation, and evaluation strategies; nutrition assessment of populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 448 or 548 |
| NTR | 450 | Nutrition in the Life Cycle | Nutritional needs and problems in pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 450 or 550 |
| NTR | 453 | Nutrition and the Media | Examines the promotion of nutrition ideas and concepts through media. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 453 or 494 (Nutrition and the Media) |
| NTR | 455 | Retail Food Service Operations | Development, evaluation and management of retail food service operations; legal and ethical issues in food and beverage management. Capstone course for food management degrees. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 (or 241); Junior standing |
| NTR | 457 | Sports Nutrition | Nutritional needs of recreational and elite athletes; energy balance; nutrient metabolism during activity; fluid-electrolyte regulation; evaluation of ergogenic supplements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; NTR 241 |
| NTR | 460 | Nutrition Entrepreneurship | Exploration of entrepreneurial opportunities in nutrition, food service, wellness and health communications. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 460 or 494 (Nutrition Entrepreneurship) |
| NTR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| NTR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NTR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |
| NTR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| NTR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 501 | Research Methods in Nutrition II | Reviews survey, focus group, and epidemiologic research; develops questionnaires, analyzes large data sets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NTR | 503 | Designing Health Behavior Change Interventions | Project-based course focuses on the process of health behavior change interventions using design process and behavioral science. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only NTR 503 or 598 (Designing Health Behavior Change Interventions) |
| NTR | 523 | Vegetarian Nutrition | Health benefits, nutritional characteristics, potential risks of vegetarian diets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 525 | Complementary Nutrition | Critical review of functional foods, phytochemicals, nutrient supplements in health promotion. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 527 | Policies, Environment, and Obesity Prevention | Enhances students' understanding of the role policies and environments play in health promotion and disease prevention with a special focus on obesity prevention. Looks at a variety of examples to see how policies and environments related to food, nutrition and physical activity affect individual and community health. Also explores how "non-health" policies can be used as an effective tool to promote healthy behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 529 | Pediatric Nutrition | Critical review of pediatric disease states and current nutritional therapies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 530 | Techniques of Health Coaching | Health coaching techniques and skills for medical, allied health and health promotion professionals. The content illustrates the theory, principles and practices of evidence-based coaching psychology. Aligns with the training programs affiliated with Wellcoaches® (endorsed by the American College of Sports Medicine). Designed in three parts: (1) building of core coaching skills; (2) establishing generative moments with clients; and (3) developing coaching presence and positive psychology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only HSC 440 or NTR 530 |
| NTR | 533 | Ethics and Policy of American Diets | Political and ethical issues inherent in the U.S. food system. Topics include food and agricultural policy, government dietary recommendations and regulations, food environment, current issues in food politics, ethical questions of food choice, issues of obesity and food security, sustainability, and investigation of how and why Americans eat the way they do. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 535 | Nutrigenomics | Provides a sound foundation for promoting personalized nutrition by integrating and applying molecular nutrition and nutritional biochemistry to clinical settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BCH 361; BCH 367; NTR 440 or 441 |
| NTR | 537 | Evidenced-Based Nutrition | Reviews current evidence of the role of diet on disease prevention, development, and management. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 539 | Global nutrition | Provides an overview of global nutrition issues, including the epidemiology, etiology, sociocultural and economic context, and program and policy responses to nutrition-related topics. Areas to be covered include childhood malnutrition, growth stunting, micronutrient deficiencies, parasites and nutrition, sanitation, and obesity and chronic disease incidence in developing countries. Course is participatory; students engage in a series of class activities, discussions, and presentations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| NTR | 540 | Advanced Micronutrient Metabolism | Metabolism of vitamins and minerals, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 440 or 540 |
| NTR | 541 | Advanced Macronutrient Metabolism | Metabolism of protein, fat, and carbohydrate, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 441 or 541 |
| NTR | 544 | Therapeutic Nutrition | Current theories of the nutritional prevention or treatment of various diseases. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 444 or 544 |
| NTR | 545 | Management of Institutional Food Service Systems | Standardizes methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. May require field trips. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 445 or 545 |
| NTR | 546 | Assessment Techniques in Nutrition | Clinical and biochemical evaluation of nutritional status. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 446 or 546 |
| NTR | 548 | Advanced Community Nutrition | Planning, development, implementation, and evaluation of community nutrition programs, including the process of grant applications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 448 or 548 |
| NTR | 550 | Advanced Nutrition in the Life Cycle | In-depth review of metabolic characteristics and nutritional needs during pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only NTR 450 or NTR 550 |
| NTR | 551 | Geriatric Nutrition | Explores the impact of nutrition on the aging process and how the aging process influences nutritional needs. Examines the physiology, demographics and economics of aging as well as issues such as end-of-life care. Addresses health promotion, disease prevention and disease management within the context of geriatric nutrition. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NTR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 310 | Nursing Concepts | Theoretical concepts related to health integrity focusing on the individual client across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BSN Nursing major in clinical program |
| NUR | 311 | Pharmacology | Applications of pharmacologic interventions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 312 | Psychomotor Skills for Professional Nursing Practice | Theoretical foundation for application of psychomotor nursing skills to professional nursing practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): Nursing major in clinical program. Credit is allowed for only NUR 312 or NUR 394 |
| NUR | 313 | Nursing Concepts for Adult Health | Nursing concepts related to selected alterations in health with focus on adult populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/co-requisites: NUR 310; NUR 311; NUR 312; NUR 320; NUR 330 with Y grade if completed; co-requisite: NUR 323. Credit allowed for only NUR 313 or NUR 394- Nursing Concepts for Adult Health |
| NUR | 314 | Health Assessment for Registered Nurses | Introductory knowledge and skills for systematic physical, psychosocial, and developmental nursing assessment over the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 315 | Methods and Critical Appraisal for Evidence-Based Practice | Scientific and clinical inquiry, research methodology, and critical appraisal in the synthesis of research findings for application in evidence-based nursing practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Pre-requisites: NUR 330 or 391 with C or better |
| NUR | 316 | Nursing Concepts for Psychiatric/Mental Health | Theoretical concepts related to select psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families, and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/co-requisites: NUR 310, 311, and 330 with C or better if completed |
| NUR | 317 | Nursing Concepts for Psychiatric/Mental Health Nursing | Theoretical concepts related to select and/or prevalent psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: NUR 311, 330, 356, 366. Co-requisite: NUR 367; Credit is allowed for only NUR 317 or 494 (Nursing Theory for Psychiatric Mental Health) |
| NUR | 320 | Nursing Practice | Integrates knowledge and attitudes from theory into the nursing care of adults in a variety of health care settings. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Nursing major in clinical program. Corequisite(s): NUR 310, 311, 312 and 330 |
| NUR | 323 | Nursing Practice Adult Health | Applies nursing process with selected alterations in health with focus on adult populations in the acute care setting. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/co-requisites: NUR 310, 311, 330 with C or better if completed; NUR 320 (or NUR 484 [Nursing Practice]) with Y passing grade if completed |
| NUR | 324 | Nursing Practice: Psychiatric/Mental Health | Application of nursing process, critical thinking, clinical decision making with individuals, families, and groups experiencing acute/chronic alterations in mental health and/or psychiatric disorders. | N | SEM | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 310, 311, and 330 with C or better; Co-requisites: NUR 316; Credit is allowed for only NUR 324 or NUR 484 (Nur Prac Psych/Mental Health) |
| NUR | 330 | Professional Nurse Attributes | Professional nursing roles and responsibilities. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisites: Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 342 | Theory II: Health Integrity and Alterations | Concepts related to selected alterations in health integrity with focus on individuals, families, and groups. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre-requisites: Undergraduate Nursing student, NUR 381 with C or better |
| NUR | 356 | Nursing Theory I | Focuses on the knowledge and skills essential to maintaining the health and wellness of clients across the lifespan and the concepts related to selected alterations in health in the adult population. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre-requisites: Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major. Pre/Co-requisites: NUR 311 |
| NUR | 364 | Professional Development II: Nursing Research for RNs | Introduces concepts and issues in nursing research. Emphasizes quantitative and qualitative research processes, examination of nursing research literature. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Pre-requisites: Undergraduate nursing student. |
| NUR | 366 | Nursing Practice I Post Baccalaureate | Applies knowledge and skills essential to maintaining health and wellness in clients across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 6 | | Pre-requisite: Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major. Pre- or corequisite(s): NUR 356 |
| NUR | 367 | Nursing Practice: Psychiatric/Mental Health | Applies nursing process, critical thinking, clinical decision-making with individuals, families, and groups experiencing acute and/or chronic alterations in mental health and/or psychiatric disorders. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 311, 330, 356 with C or better if completed; NUR 366 with Y grade if completed |
| NUR | 380 | Introduction to Nursing Informatics | Provides a brief overview of the nurse's vital role in sending and receiving information in a technology-based world of healthcare. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: NUR 310; NUR 311; NUR 320; NUR 330 |
| NUR | 381 | Health and the Media | Explores how issues related to health are portrayed in a variety of media sources, including Internet, press (electronic and print), movies, and television. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: NUR 310, 311, 320 and 330; Credit is allowed for only NUR 394 (Health and the Media) or NUR 381 |
| NUR | 382 | Emergency Nursing | Concepts of adult emergency nursing practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre/Co-requisites: NUR 413, 423, 430 and 431; Credit is allowed for only NUR 394 (Emergency Nursing) or NUR 382 |

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| NUR | 383 | Alternative Healing Practices: Nursing Implications | Explores the holistic connection between mind, body, and spirit as essential components of health and high-level wellness. Emphasizes the exploration of healing modalities not considered part of standard nursing/medical practice in the United States. Nursing exposure to other cultures has increased the need to become knowledgeable regarding the scope of therapies classified as complementary/alternative/integrative. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: NUR 310 with C or better; NUR 311 with C or better; NUR 312 with C or better; NUR 320 with C or better; NUR 330 with C or better |
| NUR | 384 | Gerontological Nursing | Focuses on optimizing the health of older adults and the management geriatric syndromes and chronic conditions. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre- or corequisite(s): NUR 330 with C or better if completed |
| NUR | 391 | Professional Nursing Theory | Analyzes the multiple dimensions of contemporary professional nursing. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | L | Pre-requisite: ENG 101; ENG102 with C or better; Pre/Co-requisite: TWC 361 |
| NUR | 392 | Health Promotion Across the Life Span | Examines concepts and theories involved in health promotion across the lifespan and their application for nurses. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 |
| NUR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 410 | Nursing Concepts for Community and Public Health | Examines concepts related to health promotion, disease prevention, and health maintenance within the global community. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; NUR 323 and 324 with Y grade if completed; Co-requisites: NUR 420 or NUR 484 Nur Prac; Comm/Pub Health; Credit is allowed for only NUR 410 or 494 (Nur Conc Comm & Pub Hlth) |
| NUR | 411 | Nursing Concepts for Child bearing and Pediatric Clients | Concepts related to care of individuals and families within the childbearing and pedatric populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; NUR 323 and NUR 324 with Y grade if completed; Co-requisite: NUR 421; Credit is allowed for only NUR 411 or 494 (Nurs Concepts- Community & Public Health) |
| NUR | 412 | Nursing Concepts for Pediatric Patients and their Families | Examines essential concepts related to the nursing care of pediatric patients and their families. Provides a nursing care approach for the pediatric patient and family across the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; NUR 323 and 324 with Y grade if completed; Co-requisite: NUR 422; Credit is allowed for only NUR 412 or 394 (Nursing Concepts: Pediatrics) |
| NUR | 413 | Nursing for Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre/Co-requisites: NUR 410, 411 and 412 with C or better if completed; NUR 420, 421 and 422 with Y grade if completed; Co-requisite: NUR 423 |
| NUR | 414 | Nursing Concepts for Adult Health | Concepts related to selected alterations in health with focus on adult populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: NUR 311, 316, 330 or 356 with C or better; NUR 366 with Y; NUR 367 with Y; Co-requisite: NUR 474 |
| NUR | 415 | Nursing Concepts for Childbearing Family | Examines the care of childbearing clients and their families. Embedded content focuses on providing care to clients along the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 311, 330 and 356 with C or better if completed; NUR 366 with Y grade if completed |
| NUR | 416 | Nursing Concepts: Community/Public Health | Examines selected concepts, theories, and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing locally and globally. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 315, 415, 417 with C or better if completed; NUR 475, 477 with Y grade if completed; Co-requisite: NUR 476 |
| NUR | 417 | Nursing Concepts: Pediatric Clients | Concepts related to care of individuals and families within pediatric populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 311, 330, 356 with C or better if completed; NUR 366 with Y passing grade if completed; Co-requisite: NUR 477 |
| NUR | 418 | Nursing Concepts: Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 311, 330, 356 with C or better if completed; NUR 366 with Y passing grade if completed; Credit is allowed for only NUR 418 or NUR 478 |
| NUR | 419 | Leading & Managing Nursing in Organizational Systems | Analyzes selected concepts and theories related to leading and managing nursing in organizational systems. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 315, 415 and 417 with C or better if completed; NUR 475 and 477 with Y grade if completed; Co-requisite: NUR 479 |
| NUR | 420 | Nursing Practice: Community/Public Health | Applies community/public health nursing concepts in the delivery of primary, secondary, and tertiary care in a variety of community settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; Co-requisite: NUR 410; Credit is allowed for only NUR 420 or NUR 484 (Nur Prac: Comm & Public Health) |
| NUR | 421 | Nursing Practice: Child Bearing/Family Nursing | Applies nursing care concepts related to the child-bearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; NUR 323 and 324 with Y grade if completed; Co-requisite: NUR 411; Credit is allowed for only NUR 421 or NUR 484 (Nursing Practice: child bearing/Family Nursing) |
| NUR | 422 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 313, 315 and 316 with C or better if completed; NUR 323 and 324 with Y grade if completed; Co-requisite: NUR 412; Credit is allowed for only NUR 484 (Nur Prac: Pediatrics) or NUR 422 |
| NUR | 423 | Nursing Practice: Complex Care & Clinical Immersion | Students perform nursing practice in a variety of clinical settings, laboratory and simulated patient care environments. Students provide nursing care to patients who are physiologically unstable in advanced medical-surgical, and critical care clinical environments. Students perform advanced psychomotor skills in the clinical, laboratory and simulation environments. Students also complete a clinical immersion experience in a selected clinical setting. During the clinical immersion experience, students have the opportunity to apply leadership and management principles, and work in interprofessional healthcare teams to provide nursing care to clients experiencing health alterations across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre/Co-requisites: NUR 410, 411, and 412 with C or better if completed; NUR 420, 421 and 422 with Y grade if completed; Co-requisite: NUR 413 |
| NUR | 430 | Professional Nurse Attributes: Leadership and Management | Applications of theories and concepts of organizations, management, and leadership with focus on nursing management and leadership in healthcare organizations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre/Co-requisites: NUR 410, 411 (or 494 Nur Con Child Bering Ped Clients) and 412 (or 494 Nur Con Ped Patients & Fam) with C or better if completed; NUR 420, 421 and 422 with Y grade if completed; Co-requisite: NUR 431 |
| NUR | 431 | Professional Nurse Attributes Innovative Professional | Focuses on the process of transition to the professional nursing role, and the gathering, interpretation, and evaluation of evidence that serves as a basis for improving client outcomes and professional satisfaction. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Pre- or corequisite(s): NUR 315, 330 with C or better if completed |

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| NUR | 440 | Community and Public Health Nursing in the United States | Examines selected concepts, theories and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing in the United States. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 391; NUR 315; TWC 361 with C or better |
| NUR | 441 | Theory III: Health Integrity and Alterations | Concepts related to health integrity and alterations with focus on individuals, families, groups, aggregates, and communities. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 6 | | Pre-requisites: Undergraduate nursing student. |
| NUR | 444 | Innovation in Nursing | Examines the role and behaviors of an innovator in the nursing profession. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 with C or better |
| NUR | 445 | Nursing Management in Health Care | Examines selected theories and concepts of organizational behavior and the management of people and resources. Focuses on the application of selected management theories and concepts to nursing practice and healthcare systems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, NUR 391, TWC 361 with C or better |
| NUR | 460 | The Art of Nursing | Explores the aesthetic, ethical, and personal patterns of knowing in nursing for the practicing RN. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | HU | Pre-requisites: NUR 391; NUR315; TWC 361 with C or better |
| NUR | 461 | Professional Development III: the Art of Nursing | Explores the aesthetic, ethical, and personal patterns of knowing in nursing. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisites: Upper Division Nursing Program students |
| NUR | 464 | Capstone: The Synthesis of Professional Nursing | Synthesizes theories and concepts for professional nursing practice with a focus on role transition. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BIO 202; CHM 101; MAT 142; MIC 205; NUR 392; NUR 440; NUR 444; NUR 445; NUR 460; NUR 495; PGS 101 (or CDE 232) with C or better |
| NUR | 474 | Nursing Practice: Adult Health | Applies nursing process with selected alterations in health with focus on adult populations in the acute care setting. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: NUR 311, 316, 330 or 356 with C or better; NUR 366 with Y; NUR 367 with Y; Co-requisite: NUR 414 |
| NUR | 475 | Nursing Practicum: Care of the Childbearing Family | Applies nursing care concepts related to the childbearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 311, 330 or 356 with C or better if completed; NUR 366 and 367 with Y if completed; Co-requisites: NUR 315 and 415 |
| NUR | 476 | Nursing Practice: Community and Public Health | Applies community and public health nursing concepts in the delivery of primary, secondary, and tertiary prevention from a population-centered perspective. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 415 or 417 with C or better; NUR 475 and 477 with Y if completed; Co-requisite: NUR 416 |
| NUR | 477 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre/Co-requisites: NUR 311, 330 and 356 with C or better if completed; NUR 366 and 367 with Y if completed; Co-requisites: NUR 315 or 417 |
| NUR | 478 | Nursing Practice: Complex Care | Applies advanced psychomotor and leadership skills, nursing care delivery management, and interprofessional referral and collaboration for clients experiencing health alterations across the lifespan in advanced care settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Corequisite(s): NUR 418. Pre- or corequisite(s): NUR 415, 417 with C or better if completed; NUR 475, 477 with Y passing grade if completed |
| NUR | 479 | Nursing Practice: Clinical Immersion | Builds on the knowledge and skills obtained in the nursing curriculum and integrates the curriculum concepts in varied and diverse practice settings. Supports the student's transition into the role of the professional registered nurse. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Corequisite(s): NUR 419. Pre- or corequisite(s): NUR 415, 417 with C or better if completed; NUR 475, 477 with Y passing grade if completed |
| NUR | 481 | Nursing Practice III | Lab, clinical experiences. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 7 | | Pre-requisites: NUR 313 (394:Nurs Conc for Adult Health), 314 (394:Nurs Conc for Psych/Mental Health), 315, 323 (484:NP Adult Health), 324 (484:NP Psych/Mental Health); Co-requisites: NUR 411 or NUR 498: Nurs Conc for Childbearing & Pediatric Clients |
| NUR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |
| NUR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NUR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 495 | Public and Global Health in Nursing | Analyzes public health concepts, theories, and practice with a focus on the health of all clients in a global environment. Includes core public health functions, domestic and international health care delivery systems, public health and health policy, conceptual and scientific frameworks for community/public health nursing practice, epidemiology, and global health issues. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, 391, and TWC 361 with C or better |
| NUR | 496 | Leadership and Management Practice for RNs | Capstone leadership and management experience for the RN student that utilizes patterns of knowing in nursing practice. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre-requisites: Undergraduate nursing student. |
| NUR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |
| NUR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-7 | L | Pre-requisites: Upper Division Nursing Program students |
| NUR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| NUR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Graduate Nursing student; NUR 551 with B or better |
| NUR | 513 | Advanced Practice Nursing Role III | Third of three courses that focus on the examination and implementation of the advanced practice nurse role, emphasizing its major components and subcomponents. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: Graduate Nursing student; NUR 512 with B or better |
| NUR | 521 | Psychiatric/Mental Health Nursing: Advanced Mental Health Assessment | Theories related to holistic health assessment for the promotion of physical/psychological health; develops skill in mental health assessments. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing student |

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| NUR | 526 | Advanced Neonatal Physical Assessment | Develops assessment skills related to neonate/infant, including history-taking, physical, developmental, behavioral, cultural, and genetics assessment to provide comprehensive advanced practice neonatal nursing care. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: Nursing MS student or Non-degree seeking Graduate student; Co-requisite: NUR 525 |
| NUR | 538 | Understanding & Applying Prin of Evidence-Based Care in Advanced Practice | Understanding how application of evidence-based practice principles assist advanced practice nurses and other healthcare professionals to provide best care. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 539 | Generating Internal Evidence and Validating Application of Evidence through Outcomes Management | Assists advanced practice clinicians to provide best care through generating and validating application of evidence using outcomes management. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | |
| NUR | 540 | Teaching Evidence-Based Practice | Focuses on strategies that have been demonstrated as effective methods for teaching evidence-based practice in academic and clinical settings. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | |
| NUR | 541 | Application of Principles of Mentorship for Change toward Evidence-Based Practice | Assists advance practice nurses and other healthcare professionals to facilitate change toward evidence-based practice through mentorship. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | |
| NUR | 543 | Disseminating Evidence to Advance Best Practice in Healthcare and Health Policy | Focuses on disseminating evidence to advance best practice with an emphasis on advancing EBP in health policy and the media. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | |
| NUR | 558 | Advanced Pediatric Health Assessment | Expansion of basic health assessment skills and development of clinical problem-solving skills for advanced practice nurses. Includes assessments of infants, children, and adolescents. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing MS student or Non-degree seeking Graduate student; Pre/Co-requisite: NUR 551, 500, 552 or 554 (with B or better if completed) |
| NUR | 578 | Gestalt Therapy I | Introduces theory and methodology of Gestalt therapy and its uses for mental health promotion and restoration. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 579 | Gestalt Therapy II | Focuses on further development of Gestalt therapy and its application in working with various client populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: NUR 578 with B or better |
| NUR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing student |
| NUR | 581 | Advanced Nursing Practicum I: Community Health Nursing | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing MS or Nursing (Comm Health Adv Prac); NUR 500 with B or better; Co-requisite: CHP 501 |
| NUR | 582 | Advanced Human Physiology | Analyzes major theories and concepts of human physiology. Explores interrelationship of physiology and health. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-3 | | Pre-requisites: MS Nursing, AHN or non-degree Nursing student; NUR 500, 552 and 554 with B or better |
| NUR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Must be in Nursing MS or Nursing (Comm Health Adv Prac); NUR 500, 551, 552 and CHP 502, with B or better; NUR 581 or 587 with B or better; Co-requisite: NUR 510 |
| NUR | 587 | Advanced Nursing Practicum II: Community Health Nursing | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing MS or Nursing (Comm Health Adv Prac); NUR 581 with B or better; Co-requisite: CHP 502 |
| NUR | 589 | Research Utilization | Emphasizes the synthesis and application of research to an identified clinical nursing problem. Must be repeated for credit. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-2 | | |
| NUR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: Nursing Graduate student |
| NUR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Nursing Graduate student |
| NUR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 601 | Professional Role Development in Nursing and Healthcare Innovation | Focuses on the development of professional role identity for the emerging educator and scientist in nursing, health care innovation, education, policy, and research. Studies the career trajectories of key leaders in nursing and health care innovation and identifies the knowledge, skills, and resources needed to expand one's career as an educator and scientist in a health-related leadership role. Analyzes leadership characteristics needed for future roles in the context of prominent issues affecting change in a futuristic health care environment. Explores strategies for progressive and creative approaches in preparing leaders for innovative change in education, research and health care policy affecting health care delivery. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisites: Nursing & Healthcare Innovation PhD student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| NUR | 602 | State of the Science in Nursing and Healthcare Innovation | Focuses on research synthesis and critiques of the scientific literature as a basis for knowledge generation related to a focal area of research interest. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing & Healthcare Innovation PhD student; Co-requisite: NUR 605 |
| NUR | 603 | Social and Contextual Issues in Nursing and Healthcare | Analyzes nursing practice and the healthcare system for an identified population using social-ecological approaches. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 604 | Philosophy of Science Perspectives in Nursing and Healthcare Innovation | Analyzes the history and philosophy of science as a basis for knowledge and academic scholarship in nursing and healthcare innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 605 | Theory Analysis | Examines theoretical perspectives and approaches guiding research in nursing and healthcare innovation across the lifespan. Includes the historical evaluation, social contextual factors, implicit assumptions, and bias that influence nursing and healthcare innovation knowledge generation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 608 | Qualitative Research Design and Methods | Explores and critiques selected qualitative research approaches. Includes fieldwork exercises as an integral part of course expectations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 609 | Quantitative Research Design and Methods | Examines multiple research approaches in clinical and health policy research from a quantitative perspective. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 610 | EBP: Critical Appraisal/Synthesis-Evidence | Knowledge and skills in critical appraisal and synthesis of evidence to guide best practice. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 611 | Collaborative Inquiry | Seminar and immersion experience designed to foster student participation in multidisciplinary research teams to address nursing and health problems. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 612 | Advanced Analysis of Variance: Design and Analysis of Experiment | Introduces theory, methods, and practice of analysis of variance. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 613 | Principles of Regression and Correlation | Introduces theory, methods, and practice of regression analysis. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 614 | Design and Implementation of Theory-Based Interventions | Focuses on the knowledge related to advanced methods for intervention research. Examines methodological, ethical, and practical issues in the design and implementation of theory-based intervention studies. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 615 | Qualitative Data Management Seminar | Qualitative research methods applied to thesis, dissertation or qualitative research reports, focusing on data reduction, analysis, interpretation, credibility, ethics and dissemination. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): COE 503 or CRJ 613 or EDP 503 or NUR 608 or PAF 610 |
| NUR | 616 | Community-Based Participatory Research | Overview of Community-Based Participatory Research (CBPR). Familiarizes participants with key historical underpinnings of CBPR, principles of CBPR practice, as well as methodological CBPR considerations in building community partnerships, issue analysis, research planning, data gathering and data sharing. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only NUR 616 or NUR 691 (Community-Based Research) |
| NUR | 628 | Research, Theory and Principles for Palliative Care in the Older Adult | Focuses on theory and research underlying end of life and palliative care for the older adult utilizing current practice guidelines and research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 629 | Research for Geriatric Practice | Gaining knowledge and skills in critical appraisal and synthesis of evidence to guide best practice in gerontology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only DNP 629 or NUR 629 |
| NUR | 630 | Mechanisms of Disparities | Analyzes and applies the complex issues underpinning culture and health disparities related to a specific health outcome to research with a selected cultural group. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Mechanisms of Culture), 598 (Mechanisms of Disparities) or 630 |
| NUR | 631 | Leveraging Culture in Intervention Development | Analyzes the complex issues underpinning the development of evidence-based interventions among various cultural groups. Also analyzes methods of leveraging culture to optimize the development, delivery, effect and evaluation of health interventions for various cultural groups. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: NUR 630 (or NUR 598 Mechanisms of Disparities); Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Leveraging Culture in Intervention Development) or 631 |
| NUR | 640 | Integrative Theories of Innovation in Healthcare | Analyzes cross-disciplinary theories of innovation for improving health and quality of healthcare. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: NUR 605; Credit is allowed for only NUR 691 (Integrative Theories of Innov) or NUR 640 |
| NUR | 641 | Theories of Emergent Leadership in Healthcare Innovation | Analyzes cross-disciplinary theories of leadership. Emphasizes leadership frameworks that describe, explain and predict the relationships among leadership and healthcare innovation and outcomes. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 640. Credit is allowed for only NUR 641 or 691 (Theories of Emergent Leadership in Healthcare Innovation) |
| NUR | 650 | Human Lactation in the Post-Modern World | In-depth exploration of the complex and multifaceted social, cultural and environmental contexts that affect the public health goal of improving successful breastfeeding during the first years of life. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only NUR 650 or 691 (Human Lactation in the Post Modern World) |
| NUR | 670 | Curriculum Development in Academic and Practice Settings | Includes analyses of historical, philosophical, societal, environmental, cultural, technological, and educational factors of curriculum development in academic and practice settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: MS Nursing (Nursing Education) or Graduate Certificate in Nursing Education; Pre/Co-requisite: NUR671 with B or better |
| NUR | 671 | Teaching in Academic and Practice Settings | Analyzes theories, issues, and research related to teaching in nursing. Focuses on the process of teaching/learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program. |
| NUR | 672 | Design and Delivery of Mediated Instruction | Addresses instructional design issues, theory, and practices related to online and electronically mediated learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 673 | Producing and Evaluating Programs for Academic and Practice Settings | Critical examination of standards, regulatory environment, administrative systems, leadership requirements, technological infrastructure, human factors, future trends regarding mediated education planning, production, and evaluation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 679 | Biostatistics: Principles of Statistical Inference | Examines principles of statistical inference and their application to the analysis and interpretation of epidemiological, psychosocial, medical, nursing, and healthcare data. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| NUR | 681 | Advanced Health Assessment of Older Adults Lab/Practicum | Skill-based course focused on advanced health assessment skills specific to older adults, including history-taking strategies, physical, functional, developmental, and psychosocial health assessment. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | |
| NUR | 682 | Geriatric Health Promotion | Examines theoretical perspectives in aging and cultural and contextual approaches for health promotion in older adults. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |

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| NUR | 685 | Geriatric Practicum | Diagnosis, management and application of advanced knowledge and skills related to assessment, screening, and health promotion of older adults in a variety of settings. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Graduate student |
| NUR | 686 | Management of Common Health Problems in Geriatrics | Provides theoretical foundation for advanced geriatric healthcare focusing on the epidemiology of aging and the effects of senescence on cognition and organ systems. Emphasizes the core concepts of aging, including health management and end of life care. Uses theory building approaches for applying health management process and outcomes to clinical practice and policy. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 687 | Geriatric Health Management Practicum | Diagnosis, management and application of advanced knowledge and skills for primary care of older adults with acute and age-associated conditions. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Graduate student |
| NUR | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 692 | Research | | N | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | |
| OBS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| OBS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OGL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| OGL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 200 | Introduction to Organizational Leadership | Presents a broad survey of leadership theory and research as currently practiced in formal organizations. Includes examination of leadership models, power and influence, team leadership, cross-cultural leadership, strategic styles of interaction, ethics, leadership skill development, decision-making techniques and effective goal implementation. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): ENG 102, 105 or 108 with C or better |

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| OGL | 220 | Behavioral Dynamics in Organizations | Explores the different theories, strategies and skills that managers and subordinates need to develop to improve interpersonal relations. Primarily emphasizes skill areas in leadership, motivation, communication, group dynamics, organizational development, conflict resolution, political strategy, cross-cultural relations, ethical behavior, stress management and time management. Develops effective strategies for becoming effective managers, subordinates, peers and students. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| OGL | 240 | Introduction to Project Management | Offers insights into each step of the project management process through an examination of various theoretical approaches. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| OGL | 260 | Resource Allocation in Organizations | Introduces the decision-making framework of resource allocation within the broader context of basic business finance. Students learn that resource allocation decisions are regularly guided by fundamental principles in finance. Primarily focuses on business resources, resource management and allocation, accounting statements, profit and loss drivers, cash and profit statements, balance sheets, budgets and forecasts, management accounts and capital investment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; MAT 117 (or any course with General Studies MA designation) |
| OGL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 300 | Theory and Practice of Leadership | Presents an in-depth study of leadership theory and its practical application in formal organizations. Includes examination of the trait approach, situational approach, contingency theory, path-goal theory, leader-member exchange theory, transformational leadership, psychodynamic approach, and women and leadership. Emphasizes application of these theories in real-world case studies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 200; Minimum 55 hours |
| OGL | 320 | Foundations of Project Management | Covers project management terminology, tools, best practices, theoretical approaches, the phases of project management and how they are applied developing a project plan and schedule, and other competencies needed to effectively manage projects. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 56 hours |
| OGL | 321 | Project Leadership, Strategy and Scope | Explores how executive management is responsible for conceiving, designing, implementing and managing the organization's overall objectives, culture, environment and processes as part of the project management process. Within this context, primarily focuses on understanding project management, aligning project management with the organization, project management oversight, projects as capital investments, globalization and resources optimization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): OGL 240 or OGL 320; minimum 56 hours |
| OGL | 322 | Project Time Management | Explores project scheduling and time management within the broader context of the planning effort. Students learn how important the determination of the timing and sequence of project activities is to the planning process—and ultimate project success. Primarily focuses on understanding bar charts, basic networks, the critical path network, precedence networks, resource allocation, schedule updating, schedule compression, scheduling and schedule risk management. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 earned hours |
| OGL | 323 | Project Cost Management | Concepts and complex processes of effective project cost management. Primarily focuses on project needs assessment, cost estimation, project cost control, project budgeting, cash flow management, financial management, value management, configuration management and supply chain management. Students also learn to appreciate the importance of integrating cost and value management processes. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 324 | Resources in Project Management | Major elements of project resource management as well as the broader context of this critical planning function. Students learn that sound resource management is an important part of developing a sustainable competitive advantage in the emerging global marketplace. Primarily focuses on operations and productivity, resources in project management, product design, process strategy, layout strategy, human resources and job design, supply chain, inventory management and scheduling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 326 | Project Procurement Management | Concepts and processes of procurement management. Primarily focuses on sourcing management, supplier selection, contracts and legal requirements, risk management, negotiation, project management, quality, supplier management and financial decisions. Effective procurement requires the use of good business practices capable of maximizing value to the organization through the acquisition of goods and services. Students learn that procurement professionals control the entire sourcing and acquisition process. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Pre-requisites: Minimum 55 hours. Credit is allowed for only BIS or OGL 350 |

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| OGL | 355 | Leading Organizational Innovation and Change | Process and theory of strategic management with primary emphasis on situation analysis, strategy formulation, strategy implementation and strategy evaluation. Covers the strategic management context, external analysis, internal analysis, functional and competitive strategies, international strategies, strategic entrepreneurship and nonprofit strategy. Students understand the process of analyzing situations, developing appropriate strategies, putting those strategies into action, and evaluating and changing those strategies as needed. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: Minimum 55 hours |
| OGL | 360 | Assessment of Leadership Effectiveness | Empirical analysis of leadership, a conceptual model of effective leadership, and a practical guide for developing the competencies and attributes most likely to produce effective leaders. Primarily focuses on leadership competencies, organizational fit, leadership strengths, fatal flaws, leadership teams, leadership development, improvement measurement and leadership follow through. Students learn to distinguish between leadership success and leadership effectiveness. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 200; Minimum 55 hours |
| OGL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 421 | Project Risk Management | Philosophy, principles, practices and techniques for managing risk in projects. Covers risk identification, qualitative risk management, risk treatment, monitoring and review, project processes, risk allocation, environmental risk and quantification of project risk. Students learn that risk management assists project managers in setting priorities, allocating resources and implementing actions and processes that reduce the risk of the project not achieving its objectives. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 422 | Project Quality Management | Process and theory of total quality management with primary emphasis on the total quality approach, ethics and corporate responsibility, strategic alliances, quality culture, employee empowerment, leadership and change, team building, effective communication, and tools and techniques. Students understand how continual improvement of people, processes, products/services, and environments can enhance the process and outcomes of project management. Students have the opportunity to develop practical total quality management skills as they apply theory and practice to real-world cases. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| OGL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | |
| OGL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| OGL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| OMT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 343 | Occupational Safety and Ergonomics | Health and safety movement, accident theories and effects, OSHA standards and liability, safeguarding, hazards, workers' compensation, ergonomics, and safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| OMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 402 | Legal Issues for Technologists | American legal system and impact on technology management issues: contracts, torts, intellectual property, white collar crime, antitrust, environmental, and employment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |
| OMT | 405 | Forecasting and Evolution of Technology | History and evolutionary nature of selected technologies, issues in the management of emerging technologies, and methods of technological forecasting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| OMT | 430 | Ethical Issues in Technology | Topics in social responsibility for industrial technology and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student |
| OMT | 440 | Introduction to International Business | International business principles and operations, including partnerships, trade agreements, currency issues, international sales, and cultural differences between countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | Prerequisite(s): Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student; MGT 301, TMC 330 (TMC 346) |
| OMT | 445 | Industrial Internship | Work experience assignment in industry commensurate with student's program. Specialized instruction by industry with university supervision. Pass/fail. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-10 | | Prerequisites: Fulton Polytechnic School undergraduate student; Minimum 2.25 GPA; minimum Junior standing |
| OMT | 452 | Industrial Human Resource Management | Concepts and practices of human resource management in a global industrial environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre requisite(s): Fulton Polytechnic School student |
| OMT | 480 | Organizational Effectiveness | Human aspects of supervisory behavior in the industrial setting and how they influence efficiency, morale, and organizational practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| OMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Pre-requisites: Minimum Junior standing; Minimum 2.25 GPA |
| OMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 502 | Financial Management | Examines corporate financial and managerial accounting systems, budgeting, and financial policy, using microcomputers to analyze, forecast, and report information. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 503 | Marketing Management | Modern methods and industrial case studies of planning, pricing, promoting, and distributing goods and services in the global marketplace. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 504 | Law and Ethics for Technical Professionals | Analyzes legal and ethical framework for making managerial decisions in the corporate environment of engineering- and technology-related industries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 520 | Strategic Management of Technology | Analyzes entrepreneurial dynamics and technology development, methods of research and development management, new technology implementation, and start-up organization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 540 | International Management | Practices and procedures for effective management of multinational business organizations, including partnerships, joint ownerships, and global subsidiaries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 548 | Statistical Methods for Research | Multivariate statistical techniques to analyze research data. Uses statistical software and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 549 | Research Techniques and Applications | Selection of research problems, analysis of literature, individual investigations, preparing reports, and proposal writing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 550 | Industrial Training and Development | Training techniques and learning processes. Planning, developing, evaluating, and managing industrial and governmental programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 560 | Managerial Decision Making | Analyzes common decision-making biases and techniques to overcome them. Uses both subjective quantitative decision tools and computerized decision aids. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 570 | Advanced Project Management | Planning, organizing, coordinating, and controlling staff and project groups to accomplish the project objective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only OMT 570 or TMC 470 |
| OMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | OP4 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OPM | 301 | Operations Management | Introduces the management of service and manufacturing conversion processes, with emphases on quality management and computer applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: Global Management student with conditional or professional status. May not enroll if completed SCM 300 with a C or better. |
| OPM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |

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| OPM | 502 | Management of Operations Technology | Design, control, and improvement of operations technology. Concepts and modeling tools required for strategic decisions in manufacturing and service operations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | |
| OPM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| PAF | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 200 | Public Service and Policy in the 21st Century | Provides a broad introduction to the field of public service and leadership. Topics include an overview of management, policy, urban studies, and leadership in the public sector. Covers the history and development of the public sector, as well as how it serves contemporary society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 201 | Economics and Public Policy | Introduces the terminology and methods of analysis in microeconomics. In particular, examines the behavior of individual consumers and firms, with a focus on market failures and the role of government policy in correcting those failures. Applies microeconomic principles to the distribution of income, policies for eliminating poverty and discrimination, the problems of environmental pollution, and the impact of different market structures on economic activity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | |
| PAF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 300 | Public Management and Administration | Examines the context and role of the public manager and the development of the field of public administration. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 301 | Applied Statistics | Focuses on statistical techniques used in social science research. Applies concepts such as measures of central tendency and dispersion as well as statistical techniques, including the following: one-sample z and t tests, two-sample t tests, chi-square, and correlation. Goals include helping students understand the mathematical and statistical concepts presented and assisting them in using these concepts in everyday life and in the study of social sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | CS | Pre-requisites: MAT 142 or higher |
| PAF | 302 | Public Service Research Methods | The philosophy, scope, and methods of public sector research. Examines quantitative and qualitative research methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 301 with C or better |
| PAF | 311 | Leadership and Change | The leader's role in bringing about significant organizational and societal change with special attention to group and organizational behavior dynamics, establishing a vision, mobilizing and empowering individuals and groups, and assessing outcomes of the change process in a variety of settings. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours |
| PAF | 340 | Contemporary Policy Challenges | Develops conceptual, critical, and practical understanding of public policy, the policy process, and policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Minimum 30 hours |
| PAF | 350 | Introduction to Science & Technology Policy | Explores the variety of ways in which governments make policies, how the policies shape the development of science and technology and their applications, and how policy may be shaped to create better futures. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 30 hours |
| PAF | 360 | Introduction to Emergency Management | Emergency management theories. Comprehensive emergency management. Mitigation, preparedness, response, and recovery. Post-disasters and policy formation. Current FEMA all-hazards approach. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 362 | Managing Natural and Technological Disasters | Federal, state, and local responses to emergencies. Management of mass casualties, evacuation, sheltering, and terrorism; declaration of emergency procedures. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 363 | Computer Applications in Emergency Management | Explores specific computer programs that are currently in use for contingency planning, tracking chemical inventories, and response resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: MAT 142 |
| PAF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 400 | Senior Capstone Project | Teaches students to solve problems related to the public sector by applying theory, knowledge, and methods from previous courses to a hands-on project in the community. Seminars include guest speakers and discussions on professional development. Students work as individuals and as a team to prepare research papers and a professional report that is presented to the community. | N | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 200, 201, 301 (or 401), 302, 311 (or 411), 340, and 460 with C or better |
| PAF | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours; Credit is allowed for only PAF 410 or URB 410 |
| PAF | 420 | Public Leadership | Examines key concepts, models, and strategies for leading public and nonprofit organizations, emphasizing self-knowledge, skills, and abilities for effective leadership. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 421 | Leadership Capstone | Builds upon leadership courses in the Leadership and Ethics certificate program by applying concepts and examples from the readings as well as individual experiences. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 311 and 410; Credit is allowed for only PAF 421 or 494 (Leadership Capstone) |

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| PAF | 424 | Comprehensive Emergency Management | Addresses theory and management techniques for emergency preparedness, including mitigation, preparedness, response, and recovery. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 425 | National Incident Management System (NIMS) | Covers concepts, terminology, players, compliance requirements, including doctrine of National Incident Management System per HSPD-5. Discussion of National Response Plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 460 | Public Service Ethics | Role, values, and issues of public management in democratic governance, citizen participation, power structures, and professional codes of conduct. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 461 | Homeland Security | In-depth analysis of policies, procedures, and organizational structure for effective homeland security program. Covers all hazard/all risk philosophy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only PAF 461 or 561 |
| PAF | 468 | Simulation and Exercising | Requirements, planning, conduct, and critique of exercises related to emergency planning. Emphasizes realism using moulage and props. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 469 | Terrorism Defense | Explores the background and evolution of terrorism. Presents specific tactics for preparation for and response to acts of terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ABS 598 (Terrorism Defense) or PAF 469 |
| PAF | 470 | Topics in Public Economics and Financial Management | Provides an analysis of public economic practices and problems in a federal system. Presents detailed descriptions, where appropriate, of significant institutions and applies modern economic theory to the ways that these institutions finance and deliver services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: ECN 212 or PAF 201 with C or better |
| PAF | 471 | Public Policy Analysis | Provides further study in the concepts, models, and operational methods used in public policy decisions and analysis. Enables students to develop higher skills needed for defining policy issues, identifying alternative solutions, and predicting the potential impact of policy alternatives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 301 and 340 with C or better |
| PAF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | | Prerequisite(s): Barrett Honors student |
| PAF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PAF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-3 | | |
| PAF | 501 | Public Service Research I | Philosophy, scope, and methods; public service research design, values, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Must have earned B or better or currently enrolled in PAF 401, POS 401, PSY 230 QBA Z21, or SOC 390 AND course must be completed within 4 previous terms |
| PAF | 502 | Public Service Research II | Quantitative techniques including multivariate analysis, data analysis, decision making, and computer applications in public affairs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |
| PAF | 503 | Public Affairs | Development and context of American public administration and policy, role of administration in governance, and values and ethics in administration. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 504 | Public Affairs Economics | Basics of public sector economics, microeconomic and macroeconomic concepts applied to public sector decisions and policies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 505 | Public Policy Analysis | Institutional and formal analysis of policy processes, decision making, and problem solving; values, ethics, and the uses of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 504 with C or better |
| PAF | 506 | Public Budgeting and Finance | Legal, social, economic, political, institutional, and ethical foundations of governmental finance, budgets, and budgeting. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better |
| PAF | 507 | Public Human Resource Management | Personnel systems, behavior and management of people in public organizations, collective behavior, unionism, conflict management, motivation, productivity, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 508 | Organization Behavior | Theory and application in the management of organizational behavior with emphasis on leadership and the public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 509 | Public Affairs Capstone | Capstone application of core course knowledge, skills, and abilities required for public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 501, 502, 503, 504, 505, 506, 507 and 508 with C or better |
| PAF | 520 | Public Management | Management process in government and public agencies, with emphasis on the executive leadership within the public sector. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 522 | Public Labor Relations | Rise of public unionism, managerial policy toward unionism, conflict resolution; impact of unionism on budgets, personnel policies, and public policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 523 | The City and County Manager | Manager's role and resources in the differing forms of administrative, legislative, and community sectors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 525 | Public Entrepreneurship | Explores entrepreneurship in the public sector from various angles, including small and large communities and nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 529 | Organization Change and Development | Explores the nature and management of change and development as a tool to achieve organizational goals; effecting planned change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |

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| PAF | 530 | Management of Urban Government | Administrative practices and behavior within the urban political administrative environment. Functional areas such as citizen participation, urban planning, urban transportation, and the conflicts between urban politics and administrative efficiency. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 531 | Community Conflict Resolution | Interdisciplinary approach to understanding the dynamics of community conflict. Strategic considerations in policy design and advocacy, potential reaction to conflict. Relevant models and research findings generated by both case studies and comparative methods. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 534 | Urban Services Infrastructure | Provides an overview of the network of services being provided in the urban environment by a variety of governmental and nongovernmental agencies. Discusses coordination, cooperation and overlap of services by local, special district, county, regional and state levels, alternate delivery methods including nonprofits, and the evolving relationship of these services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 536 | Urban Policy Making | Analyzes the opportunities and costs of influencing public policy and the roles of officials and bureaucracies in decision making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 540 | Adv Policy Analysis | Emphasizes the structure of policy problems, forecasting policy alternatives, optimizing resources, and reducing uncertainty in policy making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 505 with C or better |
| PAF | 541 | Program Evaluation | Various methodologies available for the evaluation of public policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |
| PAF | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy--especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| PAF | 546 | Environmental Policy and Management | Analyzes environmental policy and planning issues and principles related to the analysis and management of natural and urban/regional resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 547 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Credit is allowed for only BIO 515, GLG 547, PAF 547 or SOS 516 |
| PAF | 548 | Women/Politics/Public Policy | Explores how political philosophy, politics, and public policy affect and are affected by women. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 549 | Diversity Issues and Public Policy | Examines public policy issues concerning or affecting women, black, Latino, Asian, and American Indian communities, as well as those groups' impact on the policy process. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 550 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |
| PAF | 551 | Computers in Administration | Experience in use of computer technology for public administration problem solving. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 552 | Integrated Emergency Management | Theory and practice of comprehensive emergency management. Explores scope and function of Department of Homeland Security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 555 | Information Technology in Emergency Management | Provides theory and application of computer-based programs in emergency management and the use of various emergency modeling programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 560 | Community Resilience | Examines community resilience from a systems perspective, embracing governments, private, nonprofit and civic roles. Presents research, case studies, and strategies for policy planning and implementation. Provides an understanding of how community members respond to the need to prepare for, endure and recover from disasters and the ability to utilize multiple communication methods to help community members before, during and after these emergencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 561 | Interoperability for Emergency Managers | Enables understanding of the multiple technologies and skills utilized by emergency managers to enhance successful coordination and communication between all levels of emergency managers and responders during emergency mitigation, prevention, preparedness, response and recovery operations. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 554 |
| PAF | 562 | Intergovernmental Relations | Evolution, growth, present status, and characteristics of the U.S. federal system of government. Federal-state relations, state-local relations, regionalism, councils of government, interstate cooperation, grants-in-aid, and revenue sharing. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |

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| PAF | 564 | Political Economy | Classical and contemporary literature and historical development of governmental and economic arrangements, with special emphasis on the role of the state. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 565 | Theories and Practices of Democracy | Critically explores the wide range of ideas, issues, challenges, and promises related to democracy in theory and practice. Intended for all students interested in democratic leadership, public service, civic engagement, and participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 566 | Participatory Governance & Civic Engagement | Examines classic and current theoretical debates on participatory governance and civic engagement, discusses theoretical and practical implications, and analyzes different models of participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 570 | Urban Economics and Public Finance | Examines microeconomics at the intermediate level, along with topics in urban microeconomics focusing on issues of urban finance and taxation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 571 | Geographic Information Systems (GIS) and Analysis | Provides foundational information related to application of GIS technology to meet various needs within governmental operations, administration, and public policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 572 | Urban Demography | Focuses on basics of demographic analysis, including natality, migration, and mortality. Emphasizes use of demographic analysis for urban problem solving. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 573 | Advanced Regression | Examines more advanced regression topics, such as limited dependent variable analysis, time-series analysis and forecasting techniques, and simultaneity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 502 with C or better |
| PAF | 574 | Diversity, Ethics, and Leading Public Change | Focuses on leadership, ethics, and benefits and tensions of the multicultural city to develop leadership and multicultural competence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 579 | Public Policy Capstone | Integrative, client-based project course. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | L | |
| PAF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Pre-requisite: Doctoral student |
| PAF | 601 | Seminar:Pol Analysis & Eval | Normative and conceptual issues of policy formulation, implementation, and evaluation; methods of policy analysis and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 602 | Seminar: Foundations of Public Administration | Philosophy of science (including conduct of inquiry--epistemological and ontological foundations), historical development, and theoretical foundations of the field. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Doctoral PAF student |
| PAF | 603 | Seminar: Organization and Behavior in the Public Sector | Structure, organization, conduct, and performance of public sector institutions in the administration of public policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Doctoral student |
| PAF | 604 | Foundations of Public Administration II | Philosophy of science (including research design issues and alternative approaches) and contemporary public administration, including political, social, technological, and economic institutions involved in governance, exposure to research being conducted within department. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student; PAF 602 |
| PAF | 610 | Advanced Qualitative Methods for Public Affairs Research | Explores a number of qualitative research approaches and methods, including ethnography, ethnomethodology, participant observation, interviews, focus groups, content analysis, discourse analysis, and some comparative/historical methods. Also exploreS the important theoretical and ethical issues that bear on these approaches. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PhD student |
| PAF | 620 | Public Administration Professional Development Workshop | Prepares doctoral students to become productive and effective public administration scholars, teachers, and researchers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student |
| PAF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |

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| PAF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PAF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PBH | 100 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| PBH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| PBH | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| PBH | 444 | Public Health Field Experience | Provides opportunity to gain experience working in community and public health settings. Course meetings provide guidance during the field experience and an opportunity for students to share their projects. | N | RSC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Prerequisite(s): EXW 450; HCD 101 or PBH 100 |
| PBH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| PE | 123 | Tumbling | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Department of Kinesiology | 0.5 | | |
| PGM | 100 | PGA/PGM Introduction | Introduces the golf professional training program. Career enhancement, rules of golf, tournament operations, and playing professional development programs. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 110 | Player Development I | Introductory instruction on golf game improvement to assist PGM students in preparation for Players Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 111 | Player Development II | Instruction to assist PGM students in preparation for Players Ability Test with emphasis on full swing mechanics and practice plan development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 112 | Player Development III | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 113 | Player Development IV | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 114 | Player Development V | Introductory instruction on golf game improvement to assist PGM students in preparation for Player Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 120 | Golf for Business and Life | Introduces nongolfing students to the game of golf. For beginners. | N | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 130 | PGA/PGM Level 1 | Focuses on golf professional training program and the completion of the PGA Level One experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 150 | Teaching Golf I | Introduces golf instruction. Focus on fundamentals of golf swing and teaching techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 166 | Turf Equipment Management | Introduces turf equipment used on golf courses. Instruction in maintenance, adjustment, and safety issues. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 200 | PGA/PGM Level 2 | Focuses on golf professional training program and the completion of the PGA Level Two experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 250 | Teaching Golf II | Communicating with student golfers, swing evaluation, key factors club fitting, developing a successful teaching practice. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 300 | PGA/PGM Level 3 | Business planning and operations, business communications related to business of golf. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 350 | Teaching Golf III | Teaching swing concepts. Developing a teaching philosophy, analyzing flawed swing mechanics through video and swing analysis software. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 367 | Landscape Plants and Design | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 4 | | |

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| PGM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 400 | GTPP IV | Food and beverage control, supervision and delegation of golf facilities. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 466 | Integrated Pest Control | Management of pests affecting golf turf and landscape plants. Structural Pest Control Board sprayer certification preparation offered during the semester. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| PGM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGV | 380 | Science, Technology, and Values | Interdisciplinary evaluation of the mutual interaction of science, technology, and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PGV | 382 | Ethics in Engineering and Technology | Role of engineering and technology in society; focuses on ethical issues confronting engineering and technology professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PGV | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PGV | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 300 | Philosophical Argument and Exposition | Develops techniques of philosophical argument and exposition. Frequent written exercises. Course content may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisites: Philosophy majors; Minimum 25 hours; ENG 102 with C or better |
| PHI | 303 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| PHI | 304 | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 307 | Philosophy of Law | Nature and source of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 310 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |

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| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MAT 119 (or higher). Minimum 30 hours; Credit is allowed for only HPS 313 or PHI 313 |
| PHI | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | 318 | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 320 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |
| PHI | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 325 | Philosophy of Social Science | Philosophical problems surrounding the aims, structure, and methods of the social sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |
| PHI | 326 | Philosophy of Happiness | Examines ancient and contemporary philosophical models of happiness and consideration of criteria for living a life of human flourishing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| PHI | 328 | History of Ancient Philosophy | History of Western philosophy from its beginnings through the Hellenistic period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 329 | History of Modern Philosophy | History of Western philosophy from the Renaissance through Kant. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 330 | Theory of Knowledge | Nature, sources, and limits of human knowledge. Topics may include truth, a priori knowledge, empirical knowledge, perception, induction, and skepticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 331 | Philosophy of Language | Problems pertaining to the nature of language, including meaning, reference, truth, definition, analyticity, translatability, synonymy, and contributions of contemporary linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 332 | Metaphysics | Problems pertaining to the nature of reality. Topics may include nature of person, minds, substance, universals, space, time, causation, and modality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 333 | Symbolic Logic | Studies symbolic techniques to represent knowledge, deductive arguments, refutation by counter-example, and model-theoretic representation. Covers propositional and first-order predicate logic and provides a deeper understanding of theories about the world and of reasoning in life generally. Students gain a valuable tool for any field or discipline in which rigorous thinking is necessary such as science, medicine, business and the legal profession. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 or 105 or 108 with a C or better; Minimum 25 hours |
| PHI | 334 | Philosophy of Mind | Nature of consciousness. Common sense view of mind, behaviorism, materialism, dualism, functionalism, self-knowledge, and knowledge of other minds. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 335 | History of Ethics | Major works of moral philosophy, both ancient and modern, such as those by Plato, Aristotle, Hobbes, Hume, Kant, and Mill. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 336 | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 337 | Ethical Theory | Theories in normative ethics about the nature of what is right and wrong, good and bad, virtuous and vicious. May include issues in metaethics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 338 | Metaethics | Concerns questions about the nature of value, morality, and normality in general, such as "Is morality objective, subjective, or relative?" | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 25 hours. Credit is allowed for only PHI 338 or PHI 420 (Metaethics) |
| PHI | 339 | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHI | 347 | Philosophical Theories of Constitutional Interpretation | In-depth study of the philosophical theories surrounding constitutional rights and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 360 | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| PHI | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 401 | Rationalism | Examines classical philosophical rationalism, as in Descartes, Spinoza, Malebranche, or Leibniz. Contemporary rationalist thought may also be examined. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 402 | Empiricism | Examines representatives of either classical or contemporary philosophical empiricism, e.g., Bacon, Hobbes, Locke, Butler, Berkeley, Reid, Hume, Mill, Carnap, and Ayer. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 403 | Contemporary Analytic Philosophy | Aims and methods of such 20th-century philosophers as Frege, Moore, Russell, Wittgenstein, Carnap, Ayer, Wisdom, Ryle, Austin, Strawson, Quine, and Sellars, with application to metaphysics and epistemology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 405 | Moral Psychology | Advanced study of key, contemporary authors and issues in moral psychology as a subfield of philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate student; Minimum 56 hours; Credit is allowed for only PHI 405 or 420 (Moral Psychology) |
| PHI | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101 or ENG 105 with C or better. Credit is allowed for only IAS 406 or PHI 406 |
| PHI | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| PHI | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| PHI | 413 | Advanced Symbolic Logic | Properties of formal systems axiomatizing propositional and 1st-order predicate logic. May also include modal logic, number theory, and limits of logicism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 420 | Topics in Philosophy | Course descriptions on file in department. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MIC 420, PHI 317, HPS314, or PHI 428 with C or better. Credit is allowed for only MIC 428 or PHI 428 |
| PHI | 439 | Philosophy of Love and Sex | Advanced introduction to historical and contemporary philosophical writings and sociological case studies on the philosophy of sex and love. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only PHI 439 or PHI 494 (Philosophy of Love and Sex) |
| PHI | 448 | Justice and Reparations | Advanced study of the moral basis of reparations and reparative justice. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate student; Minimum 56 hours; Credit is allowed for only PHI 448 or 420 (Jus/Reparations) |
| PHI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |

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| PHI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | |
| PHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| PHI | 501 | Foundations of Ethics I | Studies primary texts of classic ethical theories and their applications to various issues in daily life and the professions. Ethical traditions include some of these frameworks: virtue ethics and natural law ethics, consequentialism and contractualism, deontology and critical communitarianism. Pays attention to the shifting nature of the relation between ethics and religion. In the applied, activity-portion of the course, students investigate real-life ethical issues and examine them from several normative perspectives. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PHI | 502 | Post-Holocaust and Reparative Ethics | Examines ethical possibilities suitable for global coexistence among secular, spiritual, and postsecular perspectives. Considers varied sources for ethical thinking in 20th and 21st centuries: existential ethics, critical theory, race and gender theory, postmodern ethics, and reparative ethics. "Post-Holocaust" ethics refers specifically to philosophy, ethics, and religion after Shoah and coming to terms with unforgivable harm, trauma, genocide, and cruelty. The seminar considers possibilities for hope after the irreparable. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate (degree or nondegree) student; Credit is allowed for only AEP 502, PHI 494 (Post-Holocaust Ethics), PHI 502, REL 494 (Post-Holocaust Ethics) or REL 582 |
| PHI | 520 | Topics in Applied Philosophy | Selected topics in applied philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 521 | Bioethics | Addresses current controversies and major topics in bioethics and biosciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 522 | Ethics of Sustainability | Explores the normative framework of sustainability. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 524 | Disaster Ethics | Investigates moral and political questions connected to disasters and emergencies such as obligations of aid workers, responsibilities for preparedness and rebuilding, and related social justice questions. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 525 | Rational Choice | Recent philosophical work on rational decision making. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 526 | Evolution and Strategic Interaction | Recent work on the philosophical significance of evolutionary models of social interactions and social structures. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 527 | Justice and Reparations | Explores the moral, legal and political aspects of reparative justice after episodes of mass violence, massive human rights violations and intergenerational harms to specific groups (for example, African-Americans and Indigenous peoples). Explores what normative moral conceptions of reparative and restorative justice support obligations to repair historical injustice, as well as contemporary forms of systemic or structural injustice for affected groups. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 529 | Feminist Philosophy | Examines contemporary feminist work in some of the subfields of philosophy, such as ethics, political philosophy, epistemology. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 530 | Moral Psychology | Central issues and texts in moral psychology including the impact of psychological research on philosophical theorizing. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 531 | Philosophy of Emotion | Theories of what an emotion is and the relevance of emotion to work in various subfields of philosophy such as ethics and philosophy of fiction. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 532 | Experimental Philosophy | Examines experimental work taken to directly bear on important philosophical theories. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 533 | Philosophy and Art | Recent philosophical work in the philosophy of fiction, visual art and/or music. Also discusses the fittingness of art works to address philosophical topics, especially in ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 540 | Topics in Value Theory | Selected topics in value theory. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 541 | Normative Ethics | Explores one or more leading normative ethical theories that inform the contemporary discussions in ethics, applied ethics, issues of justice and human rights, and public policy. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |

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| PHI | 544 | Studies in Meta-Ethics | Selected topics in meta-ethics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 545 | Studies in Philosophy of Law | Selected topics in the philosophy of law. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 546 | Studies in Political Philosophy | Selected topics or figures in political philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 550 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary post/secular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3-9 | | Pre-requisites: Graduate (degree or nondegree) student; Credit is allowed for only MAS, PHI 550 or REL 585 |
| PHI | 555 | Topics in Formal Methods | Selected topics in formal methods. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 556 | Advanced Symbolic Logic | Advanced topics in logic relevant to philosophical theorizing such as modal, deontic and temporal logic. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 557 | Philosophy of Mathematics | Examines selected topics and theories in the philosophy of mathematics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 560 | Topics in Epistemology | Selected topics in epistemology | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 562 | Perception | Recent work on the nature and content of perception. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 565 | Probabilism | Recent work on rational belief, evidence and belief change. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 566 | Studies in Philosophy of Science | Selected topics in philosophy of science. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 570 | Topics in Metaphysics | Selected topics in metaphysics | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 571 | Studies in Philosophy of Mind | Selected recent philosophical work in philosophy of mind such as the nature of sensation and perception, theories of consciousness, and the unity of the self | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 572 | Studies in Philosophy of Language | Selected recent philosophical work in philosophy of mind language as theories of meanings, direct reference and vagueness. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 576 | Realism | Recent work on realism and anti-realism, starting with Michael Dummett, and including philosophers such as Hilary Putnam, Donald Davidson, John McDowell and Kit Fine. Global realism and anti-realism and more specific realisms/antirealisms about the past, the mind, theoretical entities, mathematics and ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 581 | Studies in Ancient Greek Philosophy | Selected topics in ancient philosophy from 585 BC to 529 AD. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 582 | Studies in Modern Philosophy | Selected topics and significant figures in the modern period. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 586 | 20th and 21st C. Philosophers | Examines the work of one or more philosophers prominent in the 20th or 21st century. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 587 | Topics in the History of Philosophy | Selected topics in the history of philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |

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| PHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisites: Masters or Doctoral Philosophy student. |
| PHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHI | | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |

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| PHI | | Philosophy of Law | Nature and sources of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| PHI | | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| PHI | | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| PHI | | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| PHL | 327 | Science and Applied Ethics | Complex issues occurring on the interface of science, society, and values, with a focus on the dilemma of animal subjects in research. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 380 | Science, Technology, and Values | Interdisciplinary evaluation of the mutual interaction of science, technology, and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 382 | Ethics in Engineering and Technology | Role of engineering and technology in society; focuses on ethical issues confronting engineering and technology professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHL | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHS | 110 | Fundamentals of Physical Science | One-semester survey of the principles of physics and chemistry. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHS | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| PHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in physical science and physics. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 3 | C | |
| PHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |
| PHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 505 | Energy and the Environment | Current problems in energy resources, production, consumption, and conservation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 530 | Methods of Physics Teaching I | Inquiry approach to high school physics teaching. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 531 | Methods of Physics Teaching II | Extension of modeling techniques introduced in PHY 580. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 534 | Methods of Teaching Physical Science I, II, III | Design of curriculum and conduct of instruction for physical science courses. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| PHS | 542 | Integrated Mathematics and Physics | Mathematical models and modeling as an integrating theme for secondary mathematics and physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 550 | Physics and Astronomy | Astronomy curricula and projects for secondary school, with emphasis on the role of physics in astronomy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 556 | Astrophysics | Structure and evolution of stars, galaxies, and the universe. For secondary school teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 560 | Matter and Light | Interactions of light with matter. Lasers and spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 564 | Light and Electron Optics | Principles and practice of electron-optical instruments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 570 | Spacetime Physics | Special and general theories of relativity with implications for space and time travel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only CHM 581 or PHS 581 |
| PHS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |

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| PHS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHY | 105 | Basic Physics | One-semester survey of the principles of physics. Primarily for students who intend to take PHY 121, 131 but have not taken high school physics. | N | REC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 118 | Explorations in Science Teaching | Examines the field of physical science education via in-class meetings and classroom settings. Discusses the theory, pedagogy and practice of teaching physical science. Reviews various curricula available for the teaching of physical science with a focus on state and national standards. Students work with course instructor(s) to design three lessons that work toward some of the objectives of each cooperating teachers' class. Students are aided in developing materials, guided in planning to teach the lesson, and given time to prepare and practice the lesson. | N | SEM | N | GNA | Liberal Arts and Sciences | Department of Physics | 1 | | Pre-requisite: Mathematics or Physics or other science major |
| PHY | 121 | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | 122 | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |

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| PHY | 131 | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction, AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 132 | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | 150 | Physics I | Introductory physics for majors. Kinematics, Newton's Laws, basic forces, energy, momentum, special relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisites: MAT 266 or MAT 271 with C or better if completed |
| PHY | 151 | Physics II | Continuation of PHY 150. Electromagnetic fields; Ampere's and Faraday's Laws; Maxwell's equations; basic circuit elements. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 150 (or PHY 121 and PHY 122) with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 190 | Seminar: Physics as a Curriculum and a Profession | Seminar for new Physics majors. Instruction and information on curriculum, departmental functions, and professional preparation. Weekly meetings and excursions. Pass/fail grading. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 201 | Mathematical Methods in Physics I | Differential equations, linear equations, vectors, matrices, Fourier series, and numerical methods. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | CS | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |
| PHY | 241 | University Physics III | Thermodynamics, kinetic theory, physical and wave optics, relativity, photons, matter waves, atomic physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 131 |
| PHY | 252 | Physics III | Continuation of PHY 151. Wave physics, oscillations, harmonic systems, physical optics, thermodynamics, kinetic theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |
| PHY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barret Honors student |
| PHY | 302 | Mathematical Methods in Physics II | Continuation of PHY 201. Vector calculus, complex variables, partial differential equations, special functions, numerical methods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY201 with C or better |
| PHY | 310 | Classical Particles, Fields, and Matter I | Particle kinematics, mechanics, conservation laws, particle motion in force fields, dynamics of two-body systems, reference frames, rigid body motion, relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 201 with C or better; PHY 252 with C or better. Co-requisite: PHY 302 |
| PHY | 311 | Classical Particles, Fields, and Matter II | Electrostatic and gravitational fields, Poisson and Laplace equations, dielectric materials, magnetic fields and materials, magnetic induction, Faraday's Law. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 310 with C or better |
| PHY | 312 | Mechanics and Electromagnetism | Covers two major topics in physics, both dealing with forms of energy and momentum and how they are transmitted in space. Covers mechanics and dynamics, describing how bodies with mass move under various types of forces. Also covers electromagnetism, which describes how electric charges and magnets, and their motions, generate fields of force. Also describes how time-varying electric and magnetic fields are associated with electromagnetic waves, which include light. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 150, 151, and 252 (or PHY 121, 122, 131 and 132) with C or better |
| PHY | 314 | Quantum Physics I | Photons, models of the atom, wave properties of matter, introduction to wave mechanics, 1-D systems in quantum mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisites: PHY 201 with C or better; PHY 252 with C or better |
| PHY | 315 | Quantum Physics II | General principles of quantum mechanics, 3-D problems, approximation methods, spin, introduction to many-particle systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 314 with C or better |
| PHY | 321 | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 331 | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 333 | Electronic Circuits and Measurements | Basic principles of electronic circuit analysis and measurement techniques using modern instrumentation and computer-aided analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: MAT 272 or MAT 267 with C or better; PHY 151 (or PHY 131 and PHY 132) with C or better |
| PHY | 334 | Advanced Laboratory I | Selected experiments from contemporary physics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report form writing. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | L | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 (or PHY 131 and 132) with C or better; Pre- or Corequisite(s): PHY 314, 361, CHM 345 or EEE 434 |
| PHY | 361 | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | 371 | Driving Forces in Biology | What are the stable states of biomolecules? How do molecules interact? What forces drive molecules to bond and associate, to adsorb, to permeate through membranes, to undergo chemical reactions, to undergo conformational changes? Why are some changes gradual, as in the weakening of a ligand interaction with temperature, and others sudden (cooperative) such as protein folding or the insolubility of oil in water? Addresses these questions by statistical thermodynamics, a collection of principles and models that when combined with thermodynamics, aim to explain molecular forces and flows. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 252 |
| PHY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 412 | Classical Particles, Fields, and Matter III | Electromagnetic fields of moving charges, Maxwell's equations, harmonic phenomena, oscillations, waves, electromagnetic radiation, covariant electromagnetism, introduction to general relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 311 with C or better |
| PHY | 416 | Quantum Physics III | Introduces the quantum theory of atoms, molecules, solids and nuclei, Dirac's equation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 315 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 441 | Statistical and Thermal Physics | Statistical and experimental basis of heat, temperature, and entropy. Mechanical and statistical basis of the laws of thermodynamics. Applies macroscopic thermodynamics. Phase equilibrium. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 444 | Fundamentals of Nanoscience | For senior science majors and beginning graduate students teaching the cross-disciplinary subject of nanoscience. There is a strong emphasis on basics, so the course starts with a fairly rigorous introduction to quantum mechanics, statistical mechanics and chemical kinetics, though enough material is provided to allow nonphysics majors to come up to speed in these areas. This is followed by a survey of experimental techniques in nanoscience: microscopy, optical spectroscopy and scanning probe methods, and nanofabrication methods including "top down" and self assembly. Finally we survey applications: electrons in nanostructures, molecular electronics, nanomaterials and bio-nanoscience. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only PHY 444 or 494 (Intro to Nanoscience) |
| PHY | 452 | Physical Optics | Principles of reflection, refraction, diffraction. Additional topics from contemporary optics may include Fourier transform spectroscopy, linear systems theory, holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 311 with C or better |
| PHY | 456 | Laser Optics | Theoretical and experimental aspects of applied optics including basic concepts of lasers, properties of optical beams, resonators and interferometry. Course consists of two parts: preparatory labs and applied projects. Preparatory labs provide theoretical and technical background for understanding of general features of electromagnetic wave propagation and technical features of optical lasers including high-power laser systems. Applied projects give students the opportunity to use laser optical systems to solve real-world problems. | N | LEL | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): PHY 361; Credit is allowed for only ABS 494 (Advanced Laser Laboratory), ABS 494 (Laser Optics) or PHY 456 |
| PHY | 462 | Particle and Nuclear Physics | Nuclear properties, models, decays and reactions; fundamental forces, field theories, symmetry principles; hadrons, quarks, and leptons; the Standard Model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 465 | Advanced Laboratory II | Continuation of PHY 334. Students may substitute a short laboratory research project for one of the elective experiments of the course, in consultation with a faculty sponsor and the course instructor. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 334 with C or better |
| PHY | 466 | Advanced Laboratory III | Continuation of PHY 465. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisite: PHY 465 with C or better |
| PHY | 472 | Advanced Biophysics Lab | Offers selected experiments from contemporary biophysics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report writing. Emphasizes the importance of good notebook keeping. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): PHY 371 |
| PHY | 473 | From Molecules to Cells | Offers selected subjects from biological physics covering the length scales from biomolecules to cells. Builds on knowledge acquired from thermodynamics and statistical mechanics to formulate basic principles behind the working of life systems. Free energy, entropic forces, chemical potentials and electrostatic interactions rule the "nanometer soup" of a living cell. Proton gradients across cell membranes are behind all the energy consumed by life. Random walks, dissipative dynamics, and hydrodynamic fluxes rule time-dependent phenomena. Covers systems including biomolecules, membranes, cells and nerves. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 371 with C or better; Pre/Co-requisite: PHY 472 with C or better if completed |
| PHY | 480 | Methods of Teaching Physics | Evaluates various approaches to the teaching of high school physics. Preparation of demonstrations and experiments. Organization of a lab. Designed for secondary school physics teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 481 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better; Credit is allowed for only MSE 526, NAN 511, PHY 481 or 511 |
| PHY | 482 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 481 with C or better. Credit is allowed for only MSE 527, NAN 512, PHY 482 or 512 |
| PHY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | Prerequisite(s): minimum 45 hours |
| PHY | 495 | Project Research | Supervised project in physics or astrophysics. May be repeated for credit. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | Prerequisite(s): minimum 45 hours |
| PHY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511 |
| PHY | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 511; Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| PHY | 521 | Classical and Continuum Mechanics | Variational principles, Lagrange's and Hamilton's equations, canonical transformations, Hamilton-Jacobi theory, introduction to chaos and nonlinear dynamics, fundamentals of elasticity theory and fluid mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 523 | General Relativity | Special and general theories of relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 531 | Electrodynamics | Special theory of relativity, covariant formulation of electromagnetic interactions, Maxwell's equations, electrostatics and magnetostatics, dielectric media, inhomogeneous wave equations, Lienard-Wiechert potentials, interactions of charged particles and electromagnetic waves, scattering and diffraction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 532 | Advanced Topics in Electrodynamics | Electromagnetism of dielectric media, magnetic media, and superconductors; introduction to magnetohydrodynamics, laser physics, and nonlinear optics; additional special topics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 541 | Statistical Physics | Postulates of statistical mechanics, equilibrium ensembles, Bose and Fermi statistics, density matrix, modern theory of phase transitions, fluctuations, and linear response theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nanobiology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| PHY | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| PHY | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, SEM 552, or PHY 552 |
| PHY | 553 | Electron Microscopy Laboratory I | Lab support for PHY 552. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Corequisite(s): MSE 552 (or PHY 552). Credit is allowed for only MSE 553 or PHY 553 |
| PHY | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent beam diffraction, and electron holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE or PHY 554 |
| PHY | 555 | Electron Microscopy Laboratory II | Lab support for PHY 554. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 567 | Relativistic Quantum Mechanics and Field Theory | Relativistic quantum mechanics and introduction to the quantum field theory of scalar, spinor, and electromagnetic fields. QED through renormalization theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 568 | Particle Physics Phenomenology | Hadron physics, internal symmetry groups, weak interactions, lepton and quark phenomenology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 569 | The Standard Model and Beyond | Introduces and applies the standard model of strong and electroweak interactions. Special topics include recent developments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |
| PHY | 576 | Quantum Theory | Operator methods in quantum mechanics, time-independent perturbation theory, variational methods, angular momentum and group representation theory, identical particles; quantum dynamics, including time-ordered operators, time-dependent perturbation theory, and Fermi's golden rule. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 577 | Introduction to Quantum Field Theory | Explains necessity of generalizing quantum mechanics to a field theory viewpoint. Studies properties of scalar, spinor, and gauge fields; incorporates interactions; and learns to compute amplitudes, cross sections, and decay rates using formalism of Feynman diagrams. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 581 | Quantum Theory of Solids I | Band structure models: pseudopotentials, density functional theory; optical and magnetic response; elementary excitations; transport theory, electron-photon interactions and superconductivity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 582 | Quantum Theory of Solids II | Continuation of PHY 581: broken symmetry; phase transitions; disorder, topological defects; nano-structures topics; soft condensed matter and current research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| PHY | | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| PHY | | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |
| PHY | | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction, AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PHY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): minimum 45 hours |
| PHY | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): minimum 45 hours |
| PLA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 412 | Landscape Ecology and Planning | Reviews the evolution of landscape ecology and landscape planning and examines use and value. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| PLA | 413 | Southwest Landscape Interpretation | Explores methods and implications of landscape interpretation within the American Southwest. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| PLA | 420 | Theory of Urban Design | Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| PLA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| PLA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PLA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLB | 108 | Concepts in Plant Biology | Introduces concepts of plant biology that are of human relevance using commercially important, edible, and medicinal plants as examples. Not for majors in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| PLB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 200 | Biology of Plants | Concepts emphasizing principles and the interplay of plant structure and function at the organismal, population, and community levels. Intended for plant biology, life sciences, and biology majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| PLB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 300 | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better. Credit is allowed for only LSC 307 or PLB 300 |
| PLB | 302 | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 305 | Cacti and Succulents | Adaptive biology of desert annuals, cacti, and succulents, analyzing diverse traits that permit survival in deserts: reproduction, structure, and physiology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PLB | 306 | Plant Anatomy | Development and mature structure of tissues of vascular plants; patterns and modifications of the leaf, stem, root, and flower. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 308 | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 310 | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 with C or better |
| PLB | 320 | Environmental Science (Nonmajor) | Environmental and biological concepts applied to ecological systems with specific focus on analysis of problems caused by humans. Cannot be used for major credit in the Biological Sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | G | Pre-requisite: Junior standing; Credit is allowed for only BIO 319 or PLB 320 |
| PLB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MBB 247 or BIO 340 with C or better; Credit is allowed for only MBB 350 or PLB 350 |
| PLB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 400 | Lichenology | Chemistry, ecology, physiology, and taxonomy of lichens. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 401 | Mycology | Fungal morphology and systematics with an introduction to fungal cell biology, ecology, economic significance, and growth and development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in plant biology; requires weekly reflective reading and writing. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | C | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 404 | Phycology | Algae (both fresh water and marine forms), emphasizing field collection and identification of local representatives. Morphological, ecological, and economic aspects of the algae. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 407 | Plant Fossils and Evolution | Broad survey of plant life of the past, including the structure of plant fossils, their geologic ranges, geographic distribution, and paleoenvironment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 411 | Trees and Shrubs of Arizona | Identification of woody plants from desert, chaparral, and forest habitats in Arizona. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 414 | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 416 | Medical Botany | Explores plants affecting human health: modern- and folk-usage medicinal plants. Quality control, clinical evidence, plant chemistry, and ethnopharmacology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only BIO 419, PLB 519, BIO 519 or PLB 419 |
| PLB | 420 | Plant Ecology: Organisms and Populations | Factors and controls on the physiological ecology and organization of plants and plant populations using empirical and theoretical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 with C or better |
| PLB | 421 | Plant Ecology: Communities and Ecosystems | Plant community organization, field sampling techniques, and the structure and function of terrestrial ecosystems emphasizing the role of vegetation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 with C or better |
| PLB | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 181, GPH 111 or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| PLB | 432 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| PLB | 440 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| PLB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| PLB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only MBB 496, BIO 496, MIC 496 or PLB 496 |
| PLB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| PLB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |

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| PLB | 502 | Perspectives in Plant Biology | Introduces major areas of research within the department with the goal of broadening knowledge to enable multidisciplinary research and communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only PLB 419, BIO 419, BIO 519 or PLB 519 |
| PLB | 525 | Microclimate Methods | Techniques to measure and quantify microclimate and mass transfer. Supporting principles. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 530 | Introduction to Structural and Molecular Biology | Structure and function of cells, proteins, membranes, and the genome; gene expression and biogenesis of structures; application of computer imaging. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | |
| PLB | 540 | Plant Biochemistry | Structure/function relationships of molecules, emphasizing processes unique to plants: carbon fixation, synthesis of storage products, pigments, and secondary metabolites. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 550 | Plant Molecular Biology | Biochemistry and molecular biology of plant organelles, including protein targeting, plant viruses, and molecular designs for plant improvements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | |
| PLB | 552 | Plant Genetic Engineering | Plant transformation, utilization of transgenic plants, transient gene expression assays, and applications of plant genetic engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 553 | Plant Genetic Engineering Laboratory | Plant transformation, utilization of transgenic plants, transient gene expression assays, and applications of plant genetic engineering. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | |
| PLB | 554 | Plant Biotechnology | Aseptic, clonal propagation of plants and in vitro culture of cells, organs, and tissues. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 558 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |
| PLB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |

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| PLB | | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better; Credit is allowed for only LSC 307 or PLB 300 |
| PLB | | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLC | 101 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 102 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| PLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 201 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 202 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: PLC 201 with D |
| PLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 311 | Advanced Polish I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 202 with C or better; Credit is allowed for only PLC 311 or 394, Polish Comp and Conversation |
| PLC | 312 | Advanced Polish II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 311 with C or better |
| PLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 11-12 | | |
| PLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 101 | Elementary Portuguese | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| POR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| POR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 201 | Intermediate Portuguese | Continuation of POR 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: POR 101 with C or better |
| POR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 313 | Portuguese Composition and Conversation | Develops skill in written Portuguese and corrected oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 201 with C or better |
| POR | 314 | Portuguese Composition and Conversation | Continuation of POR 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 313 with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POR | 321 | Luso-Brazilian Literature | Representative masterpieces of Portuguese and Brazilian literature from the beginning to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: POR 313 with C or better |
| POR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 472 | Luso-Brazilian Civilization | Lectures, readings, and discussion of important aspects of Luso-Brazilian civilization. Topics from music, art, folklore, literature, history, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: POR 313 with C or better; Credit is allowed for only POR 472 or 598 (Luso-Brazilian Civilization) |
| POR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485, GPH 485, LAP 485, POR 485, PUP 485 or 585 |
| POR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| POR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| POR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Credit is allowed for only HST, POS 112 or HST 194 (Foundations of Democracy) |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | Pre-requisites: Freshman status; Maximum 25 hours |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | Pre-requisites: Maximum 25 hours |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 211 | Arizona Constitution and Government | Constitution and government of the State of Arizona. Meets the Arizona constitution requirement for teacher certification. May not be counted for the major or a teaching major or minor in Political Science | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 2 | | Credit is allowed for only POS 211, 216 or 417 |
| POS | 216 | State and Local Government | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POS 211, 216 or 417 |
| POS | 220 | Political Issues and Public Policy | Contemporary social problems and political issues, particularly development of public policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 221 | Public Administration | Role of the administrator in the political process with an examination of the basic concepts of bureaucracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |

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| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L or SB | |
| POS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| POS | 247 | Introduction to Latin American Politics | General introduction to the politics and socioeconomic structures of Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | |
| POS | 270 | American Legal System | Concepts, institutions, classifications, and functions of law. Role of the courts and impact of judicial decision making on social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 300 | Contemporary Global Controversies | Explores key controversies in global politics including security, economic stability, poverty, gender, race, and the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 301 | Empirical Political Inquiry | Logic of political inquiry, including research problems, concepts, hypotheses, theories, measurement, data collection, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 305 | Politics and Film | Examines portrayal of political events, ethnic groups, and sociopolitical situations in film, a major medium addressing questions of human values. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 313 | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 313 or POS 313 |
| POS | 314 | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 315 | The Supreme Court | Role of the Supreme Court in American society and politics; examines decision-making process and impact of decisions; restraint versus activism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| POS | 325 | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 330 | Contemporary Controversies in Domestic Politics | Explores key controversies in domestic politics including the environment, the economy, poverty, gender, race, and security. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 331 | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 332 | American Political Parties | Development of the American party system. Party organization and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 333 | Interest Groups | Examines how minority, corporate, labor, farm, consumer, environmental, health, education and public interest groups, and single-issue movements influence government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| POS | 340 | History of Political Philosophy I | Western political philosophers and their theories to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 341 | History of Political Philosophy II | Western political philosophers and their theories from the 17th to the 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 342 | Political Theory | Surveys ancient, modern, and contemporary political theorists and ideas in European and American contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU or SB | |
| POS | 346 | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 351 | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 352 | European Democracies | Addresses questions such as, How has the relationship between European citizens and the democratic process changed in the post-WWII period? How do domestic political institutions influence this process? Explores different approaches to some of the most important questions facing the study of comparative and European politics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Minimum 25 hours. Credit is allowed for only POS 394 (European Pol Democracies), 498 (European Democracies), or POS 352 |
| POS | 353 | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |
| POS | 354 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 356 | European Union | History and workings of EU member states, including single market, Euro, legal system, ethnonationalism, immigration, expansion, trade wars, and defense. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |

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| POS | 357 | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 358 | Southeast Asia | Political background, governmental institutions, political dynamics, and developmental problems of Southeast Asian nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 359 | African Politics and Society | Comparative analysis of socioeconomic forces, political processes, government institutions, and political novels in Sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Credit is allowed for only POS 361 or POL 361 |
| POS | 362 | World Politics Theory | Theoretical examination of one or more aspects of international politics, e.g., foreign policy, negotiations, alliances, crises, wars, and international systems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 360, POS 160 or POL 160. |
| POS | 364 | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 367 | World Politics and Global Inequalities | Examines the topic of global inequality and the numerous challenges that arise from it, including perspectives and theories pertaining to third world development, the historical background to the political and economic relations between the wealthy countries of the world and the poorer countries, and policies and strategies designed to promote development and alleviate poverty. Studies some contemporary issues that are related to global inequality including ethics and third-world development, sweatshop labor, corporate responsibility, and the tension between globalization and the movement of people across sovereign borders. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 360 (Current Issues International Politics), (International Security), (Organizational Studies) or POS 367 |
| POS | 368 | Ethics and Human Rights | Explores issues of ethics, morality, and human rights in the global community. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 370 | Law and Society | Analyzes debates among social scientists and legal theorists concerning the relationship between law and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| POS | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| POS | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 401 | Political Statistics | Basic concepts in statistics as they facilitate the description, explanation, and prediction of social and political phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | CS | Prerequisite: POS 301 with C or better |
| POS | 410 | Governing American Cities | Reviews modern urban problems, their sources, and potential solutions, including structural and policy alternatives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better. Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 426 | Elements of Public Policy | Each section may cover one of the following topics: consumer protection, natural resources, criminal justice, environmental protection, science and technology, or theories of public policy. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 431 | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 435 | Women and Politics | Focuses on the uniqueness of women in modern political systems and political thought. Emphasis may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | |
| POS | 436 | Gender, Sexuality, Nation-States | Issues and problems related to the interface of gender, sexualities, nationalisms, and states in various world contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| POS | 437 | Women, Power, and Politics | The roles and treatment of women within various political contexts. Specific focus may vary with instructor. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| POS | 438 | Latino Politics | Examines contemporary political issues in the diverse Latino community. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| POS | 439 | Minority Group Politics in America | Role of minority groups in American politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | |
| POS | 442 | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 443 | Topics in Contemporary Political Theory | Major problems and theories in contemporary political thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 444 | Globalization, Development, and Resistance | Explores the interconnections among globalization, development, and grassroots movements for social change in Africa, Asia, and Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 446 | Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |

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| POS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| POS | 451 | China, Japan, and the Koreas | Comparative analysis of the political modernization experiences of China, Japan, and the two Koreas, focusing on their differing reactions to the West. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 452 | China | Background of the Communist revolution, political processes, and developmental problems in China from a comparative perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 453 | Latin America | Political institutions, process, and developmental problems of South American states examined through comparative analysis, novels and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisite: minimum 25 hours |
| POS | 454 | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 456 | Latin American Cities | Urban studies of Latin American world cities, e.g., Mexico City, Santiago, emphasizing integration with U.S. cities, including Los Angeles, Phoenix. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 460 | Politics of Globalization | Theories and analysis of the politics of economic and technological globalization in the contemporary world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 464 | Border Cities: Action Research on Globalization | Examines the effects of globalization on U.S.-Mexico border cities and towns with particular emphasis on Mexican border cities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 465 | International Organization and Law | History, practical political significance, and future of international institutions, transnational regimes, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 467 | International Security | Examines issues affecting the international security of states and peoples, e.g., military, economic, technological, environmental, and demographic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 468 | Comparative Asian foreign Policies | Foreign policies of the Asian states, emphasizing their security relations and movements toward regionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 470 | Law and the Political Order | Investigates concepts of justice, political rights, adjudication and legislation, legal ordering, constitutional law, law as an instrument of change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POS 470, CMN 598 (Law and the Political Order), JHR 598 (Law and the Political Order) or MAS 598 (Law and the Political Order) |
| POS | 471 | Constitutional Law I | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; jurisdiction and organization of the federal courts; judicial review; separation of powers; federalism; the commerce clause; national taxing and spending power; state police power. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 472 | Constitutional Law II | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; due process; equal protection of laws; individual rights; civil liberties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 482, JUS 473 or POS 473 |
| POS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 485 | Political Economy | Problems, policies, and possibilities of various political-economic systems and the interrelationship of capitalism, socialism, and democracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 486 | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | L | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| POS | 501 | Methods of Political Science | Problems of method and knowledge in political science, strategies of political inquiry, and issues in philosophy of social science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Political Science student |
| POS | 503 | Empirical Political Inquiry | Research methods and techniques of the discipline, emphasizing empirical foundations and analytic methods employed in subfields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Political Science student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 527 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate (degree and non-degree) student; Credit is allowed for only ASB, BIO 517, BIO 591 (Uncertainty & Decision Making), POS 527 or SOS 518 |
| POS | 530 | American Politics | Examines major debates in the study of American political processes and institutions. Covers parties, media, elections, public opinion, interest groups, and the three branches of government. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 540 | Ancient Political Theory | Surveys the historical and philosophical developments in political thinking from the ancient Greeks up to the Renaissance. The world studied predominantly is one of profound political conflict and change. Moves from the Greek cities to the edge of modern political developments. The movement encompasses the political transformation from city-states to empires to the establishment of an overarching Christian world order that balances secular and sacred power, only to be challenged if not foundationally shaken by Machiavelli and realism. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate Political Science major |
| POS | 541 | Modern Political Theory | Surveys the development of modern political thought from Machiavelli-through Hobbes, Locke, Hume, Rousseau, Burke, Kant, Montesquieu, Constant, Bentham, Mill, and Hegel-to Marx. Focuses on the primary writings of these thinkers as well as reading secondary literature. In addition to focusing on the distinctive contribution and relevance of individual thinkers, further explores certain recurring themes among which are the following: Are freedom and equality foes or friends? What allegiance do we owe the state and why? Do we have rights against the state? What is a just state? Is private property essential to individual liberty? Do laws enhance or threaten liberty? Is self-interest an adequate basis for political allegiance? Why should we pursue the common good, if at all? Are self-interest and the common good reconcilable? | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD major; Credit is allowed for only POS 541 or 591 (Modern Political Thought) |
| POS | 545 | Themes in Political Thought | Examines a particular theme or problem in political thought from both a historical and contemporary perspective. May be repeated with approval of the director of graduate studies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 550 | Comparative Politics | Surveys major approaches across topical areas such as revolutions, authoritarianism, policy processes, interest groups, and electoral politics. Focus varies with instructor. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 552 | Women and Politics | Serve as an introduction to the comparative study of women and politics. Not a course on feminist theory; instead focuses on questions such as: Does the descriptive representation of women guarantee their substantive representation? Which electoral rules favor the election of women? Do the negative effects of gender quotas outweigh their impressive ability to increase the number of women in office? Have the news media helped or harmed female candidacies? Once in power do women govern differently than men? Focuses on the obstacles that women face in obtaining positions of power. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 552 or 598 (Women and Politics) |
| POS | 560 | International Relations | Surveys major theoretical approaches and debates in international relations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 561 | Critical International Relations | Surveys a range of literature that is classified as critical international relations (IR). Examines issues that led to critiques and dissatisfaction with conventional ideas embodied in what may be provisionally and cautiously referred to as mainstream. Assumes knowledge of basic IR theory. Readings are from the academic discipline of international relations as well as from other disciplines. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate Political Science major |
| POS | 563 | Comparative Asian Security Policies | Analyzes domestic and international constraints, belief systems, and economic components in security decisions by major powers and Asian nations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 570 | The Politics of Public Policy | Examines the political dimensions of public policymaking. Emphasizes major theoretical explanations of the policy process—particularly elements such as agenda setting, implementation, and policy change—rather than on the substance of particular policies. Focuses primarily on U.S. domestic policy, with some comparative reference to other developed democracies. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 570 or 598 (Politics of Public Policy) |
| POS | 571 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 501 or POS 571 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 572 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: HSD 501 or POS 571 with B or better. Credit is allowed for only HSD 502 or POS 572 |
| POS | 573 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |
| POS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 601 | Advanced Experimental Research | Introduces experimental and quasi-experimental research designs in political research, including lab techniques and topics in the analysis of variance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 602 | Advanced Survey Research | Presents design and conduct of political surveys, including sampling, instrument design, scaling, and statistical and graphical analysis of survey data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 603 | Polimetrics I | Introduces theory and practice of linear regression analysis. Provides skills to read, understand, and evaluate professional literature using regression analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 604 | Polimetrics II | Applies quantitative techniques to research topics producing publishable papers through exposure to time-series, logit and probit, and simultaneous equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 606 | Qualitative and Textual Analysis | Method and theory for the analysis of qualitative materials, systematic approaches for case studies, content analysis, critical analysis of texts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 636 | Electoral Behavior | Introduces fundamental concepts of electoral behavior. Emphasizes presidential elections and examines why people vote and how their votes are determined. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 638 | Law and Politics | Emphasizes research into such topics as constitutional law, women and the law, American legal system, judicial process, and judicial selection. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 651 | Politics of Change and Development | Examines contending approaches to national, social, and political change. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 652 | Religion and Politics | Analyzes the complicated and often conflictual relationship among major religious faiths, religious activists, and the state in the 20th and 21st centuries. Cover topics: secularization theory and its problems; religion as a cultural or attitudinal variable in politics; the rationality of religion, organized religions and their activists; the bases for conflicts between religion and the state; religion's role in conflict; the terms of reconciliation and collaboration; the conditions under which religion is politicized and becomes the basis of a political movement or party; and the means by which organized religions and/or their adherents seek to maintain an influence in 20th- and 21st-century politics and society. Does not provide a survey of religion and politics for all major world religions, or other religions. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD student; Credit is allowed for only POS 652 or 598 (Religion and Politics) |

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| POS | 661 | The State | Examines theories of state, state-society relations, and interstate politics emphasizing questions of sovereignty, territoriality, violence, representation, democracy, and change. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 664 | War, Peace, and Conflict Processes | Systematic analysis of the causes of war, the preconditions for peace, and approaches to the resolution of conflict. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 671 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 601 or POS 671 |
| POS | 672 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 602 or POS 672 |
| POS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| POS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| POS | | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisites: Maximum 25 hours |
| POS | | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | |
| POS | | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| POS | | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & G | |
| POS | | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 313 or POS 313 |

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| POS | | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| POS | | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |
| POS | | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POS 361 or POL 361 |
| POS | | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| POS | | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| POS | | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| PPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 210 | Teaching Fitness Activities for K-12 Students | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 215 | Teaching Team Sports | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PPE | 220 | Teaching Lifetime Activity K-12 | Participating in and teaching sequenced activities K-12. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 225 | Teaching Cooperative and Initiative Games | Participating in and teaching sequenced adventure-based activities. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 230 | Teaching Group Exercise | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Credit is allowed for only PPE 230 or 294 (Teaching Group Exercise) |
| PPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 300 | Introduction to Physical Education, Fitness and Sport | Introduces the fields of physical education, exercise science, sports medicine, and related fields. Discusses the history and trends of physical education as well as key concepts, programs, problems, and issues related to teaching physical education. Teaches essential background knowledge, better preparing for career success. The online (blackboard) component of this class provides practical experiential learning and assesses knowledge and comprehension of the key concepts presented in the course. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 60 hours; Junior or senior standing; Credit is allowed for only PPE 300 or 394 (Intro to Physical Education, Fitness & Sport) |
| PPE | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Co-requisites: One of the following: ECD/EED/SED/SPE /BLE 396/397/478/496, PPE 474/484 or TEL 484. Credit is allowed for only PPE 310 or HSC 310 |
| PPE | 315 | Pediatric Movement Sciences for Physical Educators | Provides a general overview of the functional anatomy of the human body as it relates to movement and the biomechanical principles underlying the execution of a given motor skill. Also examines the influence of physical growth and maturation on the development of motor skills. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 315 or 394 (Apld Pediatric Functional Anat) |
| PPE | 320 | Exercise Physiology Concepts for Physical Educators | Provides an introductory-level understanding of how the body responds prior to, during, and after participation in dynamic and static exercise. Examines the physiological basis of human movement, with emphasis on reviewing what exercise physiologists have learned about the diversity of physical activity, specifically in children. Although many physiological responses to activity are predictable, the magnitude and pattern of responses are unique depending on the age, gender, and previous experience of the individual. Also examines the role an active lifestyle plays in the overall health and well-being of school-aged children and adolescents. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 320 or 394 (Pediatric Exercise Physical) |
| PPE | 335 | Movement and Physiology Principles of Children and Youth in Physical Activity Environments | Provides an introductory-level understanding of mechanical principles underlying human movement, the developmental patterns reflected in human movement birth through childhood and adolescence, basic principles of motor learning and the physiological basis of human movement. Covers how these principles directly affect the development of physical activity opportunities in in community-based sport and recreation settings with a specific eye toward the role an active lifestyle plays in the overall health and well-being of children and youth between the ages of 6 and 18. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing |
| PPE | 340 | Understanding Children in Physical Activity Environments | Teaches students an understanding of elementary-aged children and how to implement a curriculum in a physical activity environment. Students learn effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective facilitators use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th grade youngsters. Prospective facilitators leave with requisite knowledge to implement a comprehensive physical activity program and the physical skills necessary for successful instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| PPE | 345 | Adolescents in Physical Activity Environments: Understanding and Practices | Gives an understanding of the changing scope of physical education in an era of education reform. Students learn about and teach a variety of curricular models and styles. Uses technology and assessments in authentic settings. Focuses on increasing the physical activity levels of secondary students during physical education and also promotes physical activity outside of the school setting. Covers strategies for advocating the importance of quality physical education to school and district personnel during a time when local administrators are pressured to allocate more time to core subject areas. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing |
| PPE | 351 | Coaching of Children and Adolescents in Physical Activity Environments | Provide introductory-level understanding of the skills and knowledge needed to deliver positive sport experiences in various nonschool settings that lead to positive youth development. Effective use of these skills enhances the chance that children and youth come to programs that are fun, engaging, safe and positive challenges; while having clear rules, requiring personal responsibility and demanding respect for self and others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing |
| PPE | 365 | Teaching Physical Activity Concepts | Teaching physical activity concepts in PE settings. Analyzes and critiques state and national physical education standards. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Credit is allowed for only PPE 365 or 565 |
| PPE | 370 | Research on Teacher Education in Physical Education | Discusses current research on teacher education across fields, with an emphasis on physical education pedagogy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Credit is allowed for only PPE 370 or 570 |
| PPE | 375 | Coaching Methods for Youth Sports | Scope and values of coaching K-12. Methods, materials, and practice in coaching philosophy. Best practices and activities for grades K-12. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Credit is allowed for only PPE 375 or 575 |

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| PPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 396 | Clinical Experience in Physical Education: Elementary | Analyzes course content in an elementary/secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Program |
| PPE | 397 | Clinical Experience in Physical Education: Secondary | Analyzes course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Teacher Preparation Program |
| PPE | 430 | Analysis of Skill and Game Performance | Develops analytic skills for informal and formal assessment of student learning in physical activity settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 494, 598 (Analysis of Skill and Game Play Performance) or PPE 430 |
| PPE | 450 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only PPE 450 or PPE 550 |
| PPE | 451 | Innovative Programming in Elementary Physical Education | Provides students with an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students also become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 451 or 551 |
| PPE | 455 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 460 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 477 | Student Teaching in Physical Education Elementary K-6 | Provides an understanding of elementary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| PPE | 478 | Student Teaching in Physical Education Secondary | Provides an understanding of secondary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in 7th- through 12th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| PPE | 480 | Professional Seminar for Physical Education | Methods of instruction, organization, and presentation of appropriate content in elementary and secondary physical education | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to Professional Program |
| PPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Admission to Professional Program |
| PPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 495 | Research on Teaching in Physical Education | Contemporary research and theory on teaching across fields with an emphasis on physical education pedagogy; provides a practical research experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| PPE | 535 | Introduction to Sport Education | Introduces a grade 5-12 school physical education curriculum that focuses on providing more complete and more authentic sport experiences. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (Degree or non-degree) students; Credit is allowed for only PPE 494, 598 (Sport Education) or PPE 535 |
| PPE | 550 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Students who have credit for PPE 450 may not enroll in PPE 550 |
| PPE | 551 | Innovative Programming in Elementary Physical Education | Provides an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only PPE 451 or 551 |
| PPE | 555 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and non-degree); Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 560 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and Non-degree); Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 565 | Teaching Physical Activity Concepts | Teaching physical activity concepts in PE settings. Analyzes and critiques state and national physical education standards. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 465 or 565 |
| PPE | 570 | Research on Teacher Education in Physical Education | Discusses current research on teacher education across fields, with an emphasis on physical education pedagogy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 370 or 570 |

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| PPE | 575 | Coaching Methods for Youth Sports | Scope and values of coaching K-12. Methods, materials, and practice in coaching philosophy. Best practices and activities for grades K-12. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only PPE 375 or 575 |
| PPE | 576 | Research on Curriculum in Physical Education | Discusses and applies research findings on curricular models for physical education and physical activity in school settings and beyond. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 585 | Research on Teaching in Physical Education | Contemporary research and theory on teaching across fields, with an emphasis on physical education pedagogy; provides a practical research experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 593 | Applied Project | | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | | Clinical Experience in Physical Education: Secondary | Analyzes course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Teacher Preparation Program |
| PRM | 120 | Leisure and the Quality of Life | Conceptual foundations for understanding the role of leisure in the quality of life. Social, historical, psychological, cultural, economic, and political foundations of play, recreation, and leisure. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |
| PRM | 150 | Outdoor Pursuits | Theories and practical applications related to outdoor recreation pursuits. Interdisciplinary approach to wilderness issues and philosophies, culminating in an outdoor experience. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |

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| PRM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| PRM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 210 | Community Services and Professions. | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| PRM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| PRM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with C or better; minimum 2.50 GPA; minimum 45 hours. Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| PRM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| PRM | 304 | Recreation Planning and Facility Development | Surveys development and management of public, private, and commercial recreation areas and facilities with a focus on meeting program needs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): CRD 210(or NLM 210,PRM 210 or TDM 210) with C or better; MAT 142, C or better; Nonprofit Leadership & Management (or Parks & Recreation Management or Recreation & Tourism Management) major; minimum 2.50 cumulative GPA; minimum 45 hours |
| PRM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| PRM | 311 | Leadership in Recreation and Tourism | Leadership theory and strategies applied to recreation and tourism settings, emphasizing group dynamics, motivational processes, and supervisory skills. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 2.0 GPA |
| PRM | 315 | Community Recreation Systems | Explores and assesses community recreation delivery systems in the United States. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM120 (REC120) with C or better |
| PRM | 320 | Talent and Entertainment Concepts | Provides theory and skill development focused on management, marketing, finances, facilities, equipment, and operations related to coordinating entertainment elements. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: PRM 486 (or RTM 486) with C or better |
| PRM | 321 | Event Protocol, Ethics, and Etiquette | Theoretical and practical focus on the special elements of protocol, ethics, and etiquette as they apply to special events management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: PRM 486 with C or better |
| PRM | 324 | Festival Site Design | Provides both a theoretical basis and practical skills focused on how to physically design and lay out a special event. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: PRM 486 with C or better |
| PRM | 325 | Working with Subcontractors and Vendors | Theory and skills focused on equipment rentals, food and beverage vendors, arts and crafts vendors, commercial vendors, and other subcontracted entities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: PRM 486 with C or better |
| PRM | 326 | Sponsorship | Provides theory and practical skills focused on selling, partnership, benefit/assets, and leverage concepts of sponsorship for special events. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: PRM 486 with C or better |
| PRM | 328 | Budgeting and Accounting for Special Events | Focuses on details related to budgeting, accounting, and financial controls used in special event management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: PRM 486 with C or better |
| PRM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| PRM | 340 | Outdoor Survival | Interdisciplinary approach to outdoor survival, including attitudes, psychological stress, physiological stress, preparation, hypothermia, navigation, flora, and wildlife. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 355 | Team-Building Strategies | Explores the concepts and strategies for facilitating team building, self-confidence, and positive self-esteem in situations across the lifespan. | N | LEL | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 360 | Policy, Planning, Development of Recreation and Tourism Resources | Investigates the policy, planning, development, and management practices related to the provision of recreation and tourism opportunities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 364 | Foundations of Recreation Therapy | Overview of therapeutic recreation and its concepts, practices, service models, and settings. Explores the provision of recreation and treatment services for individuals with disabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | Prerequisite(s): minimum 45 hours |
| PRM | 370 | Public Lands Management | Introduces outdoor recreation resource delivery systems; history of wilderness and outdoor recreation resources; the role of outdoor recreation in society; outdoor recreation agencies; related environmental issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): minimum 45 hours |
| PRM | 380 | Wilderness and Parks in America | Examines the American Conservation Movement and the relationships between the environment and recreation behavior. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB & H | |
| PRM | 384 | Child Life Practicum | Combines clinical field exposure with classroom instruction to maximize understanding and skill mastery. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3-12 | | Pre-requisite: PRM 364 with C or better; Admission to Child Life Certificate program |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PRM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 400 | Intervention Techniques in Recreation Therapy | In-depth analysis of theoretical and philosophical approaches to therapeutic recreation practice with emphasis on various facilitation techniques used in therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 364 |
| PRM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| PRM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| PRM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing ; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| PRM | 406 | Program Design & Administration in Recreation Therapy | In-depth analysis of assessment, treatment planning, program implementation, documentation, and evaluation strategies employed in therapeutic recreation practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) with C or better: PRM 364, 400 (or PRM 455) |
| PRM | 413 | Leadership & Professional Development in Recreation Therapy | Examines therapeutic recreation leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 301, NLM 301, PRM 301 or TDM 301 with C or better; PRM 303 or TDM 372 with C or better; Senior standing; Minimum 2.50 GPA |
| PRM | 422 | Entertainment, Protocol, and Programming for Special Events | In-depth analysis of the theoretical and philosophical aspects of special event management relative to talent and entertainment, protocol, etiquette, ethics, and programming. Requires some field work in event management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better |
| PRM | 423 | Special Event On-Site Operations | Expands on the concepts of event programming with in-depth examination of the theoretical and philosophical aspects of event operations, festival site design, and working with subcontractors and vendors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 424 | Recreation Program Management | Provides nonmajors with an in-depth look at recreation program management in a variety of settings with diverse groups. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM 160 or PRM 120 (REC 120) with C or better or currently enrolled; Not open to Parks & Recreation Management, Recreation (Management concentration) or Nonprofit Leadership & Management majors. |
| PRM | 427 | Revenue Generation for Special Event Management | Examines theoretical and philosophical aspects of revenue generation relative to special events through in-depth exploration of budgeting, accounting, and sponsorship opportunities. Requires field work at an event. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 450 | Leisure and Aging | Examines the factors influencing leisure among older adults, including policy issues and program service implications. Involves fieldwork. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |
| PRM | 453 | Volunteer Management in Human Service Organizations | Administration of volunteer service programs. Study and analysis of volunteer personnel process. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 454 | Human Services for At-Risk Youth | Overview of policy and programs affecting at-risk youth; examines risk factors and programmatic solutions to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 455 | Play in Child Life | In depth study of the techniques, principles and theories of play applied in clinical practice to enhance healing, growth and development with children and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CDE 232 with C or better. Pre- or corequisite(s): PRM 364 with C or better if completed |
| PRM | 460 | Assessment & Documentation in Recreation Therapy | In-depth study of the therapeutic recreation assessment process, including examination of interview techniques, assessment instruments, treatment planning, outcomes, evaluation, research, and documentation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 364 with C or better |
| PRM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| PRM | 470 | Environmental Communication | Park interpretation and environmental education that includes theories, principles and techniques. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours |
| PRM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| PRM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |
| PRM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |
| PRM | 486 | Special Events Management | Principles of programming and managing special events for diverse populations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 487 | Advanced Special Events Management | Advanced principles of special event sponsorship, public relations, marketing, contracting, risk management, and financial management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better. Credit is allowed for only PRM 487 or RTM 487 |
| PRM | 488 | Event Marketing and Promotion | In-depth look at the influence and role of print and social media in special event management. Studies theory, strategies, and planning relative to experience marketing, including the use of promotions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |

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| PRM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PRM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| PRM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| PSB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 501 | Basic Principles of Applied Behavior Analysis | Fundamental principles of behavior including the history, theory, definitions, processes, concepts and characteristics of applied behavior analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 510 | Basic Principles of Experimental Analysis of Behavior | Practical applications of research methodology to examine the effects and evaluate the efficacy of behavioral interventions. Provides an empirical science approach to designing, conducting and critically evaluating research involving applications of the experimental analysis of behavior in the use of graphic displays, single-case, ABAB, multiple baselines, changing criterion and alternating treatment designs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |
| PSB | 511 | Advanced Research Methods | Focuses on research techniques such as time-series methods for single-case assessment, behavior measurement and the effectiveness of treatment interventions on behavior. Topics include conducting component and parametric analyses and use of experimental designs such as withdrawal, reversal, criterion and multiple baselines. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 520 | Ethical Issues and Professional Standards in Applied Behavior Analysis | Ethical standards and legal responsibilities including regulatory requirements and Arizona licensing statutes for ABA professionals who provide services to individuals with special needs and their families. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 530 | Behavioral Observation and Functional Assessment | Focuses on how to conduct behavioral observations and functional analyses using various methods for assessment and for data collection, organization and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 540 | Development of Applied Behavioral Intervention Programs | Techniques for conducting task analyses; developing target intervention outcomes; determining alternative behaviors and environmental changes; use of behavior change procedures such as reinforcement, extinction, punishment, shaping, modeling, training and teaching. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSB 501, 510. Corequisite(s): PSB 530 |
| PSB | 563 | Basic Principles of Organizational Behavior Management | Overview and the use of Behavioral Systems Analysis (BSA) and Performance Management (PM) as they relate to the identification and modification of environmental variables that can affect and improve individual and organizational performance as a system. Basic techniques include analysis of antecedents, behavior and consequences and development of interventions to support the desired performance improvements and increase system productivity. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |
| PSB | 573 | Advanced Principles of Learning and Analysis of Behavior | Provides an in-depth review of the philosophy and theory of behaviorism and its scientific application. Includes Skinner's conceptual framework plus fundamental elements of behavior change and procedures. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 578 | Applied Behavior Analysis in Developmental Disorders | Provides an overview of the major theories and research related to the development of psychological disorders of childhood and adolescence including autism, attention deficit disorder, behavior disorders and intellectual disabilities. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MS Applied Behavior Analysis major |
| PSB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |

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| PSB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | |
| PSY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 222 | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 231 | Honors Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology for honors students. Lab includes learning to use statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | CS | Prerequisite(s): Barrett Honors student; MAT 119, 170, 242, 251 or higher with C or better; PSY 101 (PGS 101) with C or better |
| PSY | 244 | Introduction to Directed Child Study | Developmental theories and methods of social interaction with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSY | 250 | Psychology and Society | Addresses how social and behavioral science theory and research are used to understand behavior related to various social issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 306 | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |

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| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, OBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 344 | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 351 | Honors Social Psychology | Critical analysis of human social behavior for honors students; topics include stereotyping, social influence, attraction, aggression, helping, groups, and attitudes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): Barrett Honors College student; PSY 101 (PGS 101); Credit is allowed for only PSY 350 (PGS 350) or PSY 351 (PGS 351) |
| PSY | 360 | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 365 | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 369 | Biology of Human Sexuality | Biology of Human Sexuality | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; completed one semester of Biology |
| PSY | 370 | Interpersonal Relationships | Development of personal skills for competent functioning in interpersonal relationships across multiple social contexts. Principles of mental health adjustment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| PSY | 390 | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395 |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Liberal Arts and Sciences | Department of Psychology | 1-3 | | |
| PSY | 414 | History of Psychology | Historical development of psychology from its philosophical beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 420 | Analysis of Behavior | Research, applications, and philosophy of the analysis and control of human behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 and 320 with C or better |
| PSY | 424 | Genetic Psychology | Introduces the concepts, methodologies, and findings of behavioral genetics for Psychology majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 425 | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | 426 | Neuroanatomy | Structure and function of mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): PSY 325 with C or better; Credit is allowed for only PSY 426 or 526 |
| PSY | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): BIO 353, 462, 467, MIC 420, or PSY 325, 425 with C or better. Credit is allowed for only MIC 427 or PSY 427 |
| PSY | 430 | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | 434 | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | 437 | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 438 | Human-Computer Interaction | Theories, methods, and findings concerning the usability of computer systems and the design of effective user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 439 | Training and Skill Acquisition | Theories, methods, and findings concerning the acquisition of skilled performance and the design of effective training systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 440 | Industrial/Organizational Psychology | Examines personnel selection, performance assessment, job and workplace design, job satisfaction, organizational behavior, management systems, and industrial safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 441 | Cognitive Development | Experimental and theoretical literature in child development and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |

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| PSY | 443 | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | 444 | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 446 | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 447 | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 448 | Human Factors in Transportation | Examines human performance and human-machine design issues in aviation and ground transportation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 449 | Human Factors in Sport | Examines how psychological principles can be applied to enhance the performance of athletes and coaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 451 | Stereotyping, Prejudice, and Discrimination | Critical investigation of the processes underlying, and the factors contributing to, stereotyping, prejudice, and discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 452 | Applied Social Psychology | Studies applications of social psychological theory and concepts in natural settings; research design and data analysis. Lecture, lab-type activities. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 350 (PGS 350) or 351 with C or better; PSY 290 with C or better |
| PSY | 453 | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | 458 | Group Dynamics | Theories and methods of group leadership, group effectiveness, communication within groups, and relations between groups and individual members. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 461 | Interpersonal Influence | Principles and procedures that affect the process of social influence; consideration of attitudinal, compliance-inducing, and perceptual influences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better; PSY 350 (PGS 350) or 351 with C or better |
| PSY | 462 | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 465 | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |
| PSY | 468 | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 470 | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 471 | Psychological Testing | Methods and theory of psychological testing, various types of psychological tests, consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 472 | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | 473 | Psychology and Politics of Child Maltreatment | Examines psychological literature on child maltreatment in the context of development. Explores interactions between professionals responding to maltreatment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; PSY 230 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 475 | Multicultural Issues in Clinical Psychology | Discussion-based course that focuses on cross-cultural conceptions of mental illness, diagnosis and treatment approaches, and beliefs and practices of specific ethnocultural groups in the United States. Encourage students to critically think about diversity issues in clinical psychology, one's own attitudes, and culture and psychology more broadly. Students achieve these objectives through reading empirical articles and chapters; taking quizzes and exams; completing hands-on exercises, essays and other writing assignments; and actively participating in and facilitating class discussions. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only PSY 475 or 498 (Clinical Psychology: Multicultural Issues) |
| PSY | 477 | Applied Psychology Capstone Experience | Applied psychology from a systems perspective. Requires a report based on research and/or applied work as a culminating experience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | 480 | Cross-Cultural Social Psychology | Focuses on patterns of social behavior in individualistic and collectivistic cultures. Includes multidisciplinary research using qualitative and quantitative methodologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): PSY 101 (PGS 101) with C or better; PSY 350 (PGS 350) with a C or better |
| PSY | 482 | Social Influence and Consumer Behavior | Discusses social influence principles, emphasizing strategies employed by professionals that affect consumer behavior. Analyzes consumer defenses against manipulations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-7 | | Prerequisite(s): PSY 290 with C or better |

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| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): PSY 399 |
| PSY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 501 | Supervised Teaching | Experience in and examination of perspectives on teaching undergraduate psychology. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 512 | Advanced Learning | Principles and theories of learning, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 515 | Quantitative Research Methodology and Statistics I | Introduces advanced experimental and quasi-experimental research design and analysis. Focuses on group-based design and univariate analysis of variance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Psychology MS student |
| PSY | 516 | Quantitative Research Methodology and Statistics II | Advanced experimental and quasi-experimental research design and analysis. Focuses on principles underlying linear regression and related statistical techniques. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 515 with B or better; Credit is allowed for only PSY 516 or 598 (Psychological Methods II) |
| PSY | 526 | Neuroanatomy | Covers the structure and function of the mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): graduate; Credit is allowed for only PSY 426 or PSY 526 |
| PSY | 528 | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 530 | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 531 | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 532 | Analysis of Multivariate Data | Matrix algebra for multivariate procedures, component and factor analysis, canonical and discriminant analysis, classification, MANOVA, logistic regression, hierarchical linear model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 533 | Structural Equation Modeling | Path analysis; exploratory and confirmatory factor analysis; recursive and nonrecursive latent variable models; mean and covariance structures; latent growth models. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 534 | Psychometric Methods | Theory and practice of psychological measurement using classical and modern test theories. Reliability assessment, test validation, test construction, test usage. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 535 | Cognitive Processes | Theoretical/empirical treatment of the human organism as a processor of information, including abstraction, memory structure, problem solving, and thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 536 | Statistical Methods in Prevention Research | Statistical methods used in prevention research including epidemiological methods, logistic regression, program effect estimation, estimation, and mediation analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 537 | Longitudinal Growth Modeling | Growth modeling methodology to describe individual variation in development over time. Employs multilevel and structural equation modeling frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 538 | Advanced Structural Equation Modeling | Mean and covariance structure analysis. Includes multiple-group modeling, two-level hierarchical modeling, longitudinal growth modeling, analysis with categorical outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 539 | Multilevel Models for Psychological Research | Multilevel (i.e., hierarchical linear) modeling, as described by Raudenbush and Bryk (2002) and others. Covers analytic strategies for analyzing a variety of different nested data structures (e.g., couples data, clients nested within group therapy settings, children nested within classrooms, longitudinal data). Covers two- and three-level models for cross-sectional and longitudinal data and also addresses related topics such as centering and estimation. Students perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 531; Credit is allowed for only PSY 539 or 591 (Multilevel Modeling) |
| PSY | 540 | Missing Data Analysis | Covers analytic strategies for analyzing data with missing values, with a special emphasis on modern approaches for dealing with missing data, in particular maximum likelihood missing data handling and multiple imputation, maximum likelihood estimation and multiple imputation. Familiarizes students with missing data theory, traditional analysis methods (e.g., deleting incomplete cases, single imputation methods), maximum likelihood estimation, multiple imputation, planned missing data research designs, and the inclusion of auxiliary variables. Students learn how to perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 532; Credit is allowed for only PSY 540 or 591 (Missing Data) |
| PSY | 541 | Research in Cognitive Development | Theoretical and empirical issues in the study of children's knowledge and cognitive processes. Comparison of research in Piagetian and other traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 542 | Social Development | Reviews and critiques major issues in the area of social development. Covers theory, research, and content. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 550 | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 551 | Advanced Social Psychology | Continuation of PSY 550. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 554 | Item Response Theory | A collection of measurement models based on item response theory (IRT). The models express the probabilities of responses to test or questionnaire items as a function of latent respondent characteristics and item properties. IRT models form the basis for measurement in standardized educational testing, but generally are also now used in clinical, social and personality measurement in psychology, medicine and the social sciences. Assumptions underlying IRT models, methods of parameter estimation and fit evaluation. Also covers important applications of the models in computerized adaptive testing, the detection of measurement bias and multidimensional IRT. Uses several software tools useful in IRT modeling. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 534; Credit is allowed for only PSY 554 or 591 (Item Response Theory) |
| PSY | 555 | Experimental and Quasi-Experimental Designs for Research | Reviews research techniques. Analyzes lab and field research; applications to specific topics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 560 | Advances in Theoretical Psychology | Covers new empirical and theoretical work in psychology with emphasis on its applicability. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 561 | Methods in Applied Psychology | Methods of particular value in applied settings, including usability testing, prototyping, and use of computers in data collection and analysis. May be repeated for credit up to 9 hours. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 562 | Advanced Human Factors | In-depth study of the issues, methods, and findings in industrial and organizational psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 563 | Advanced Industrial and Organizational Psychology | In-depth study of the issues, methods, and findings in industrial and organizational psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 572 | Psychological Assessment | Theory and research on assessment of personality, psychopathology, and intelligence; construction of psychological assessment instruments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 573 | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 574 | Psychotherapy | Detailed survey of the theoretical and empirical literature relating to verbal psychotherapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 576 | Dynamical Systems in Psychology | Analyzes patterns of behavior change in psychological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 578 | Developmental Psychopathology | Covers major theories and research related to the development of psychological disorders of childhood and adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 582 | Community Psychology | Community systems, intervention techniques, consultation models, history and current status of community mental health movement, and conceptualization of the roles of community psychologists in social system intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| PSY | | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | |
| PSY | | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| PSY | | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| PSY | | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|
| PSY | | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| PSY | | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | |
| PSY | | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |

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|---------|----------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------|
| PSY | | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | | Applied Social Psychology | Studies applications of social psychological theory and concepts in natural settings; research design and data analysis. Lecture, lab-type activities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 350 (PGS 350) or 351 with C or better; PSY 230 with C or better; PSY 290 with C or better |
| PSY | | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | | Group Dynamics | Theories and methods of group leadership, group effectiveness, communication within groups, and relations between groups and individual members. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |
| PSY | | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | Prerequisite(s): PSY 290 with C or better |
| PSY | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Prerequisite(s): PSY 399(PGS 399) with C or better |
| PSY | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): PSY 399 |

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| PSY | | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| PSY | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| PSY | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman; maximum 25 hours |

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| PUB | 501 | Introduction to Scholarly Publishing | Introduces the purpose, organization, and operation of scholarly publishing, including its history, societal role, and current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PUB | 502 | Scholarly Editing | Publishing procedures, proofreading, and manuscript editing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 503 | Advanced Scholarly Editing | Advanced manuscript editing, acquisitions, developmental editing, and indexing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 510 | Research in Scholarly Publishing | Individual or group research projects on issues in scholarly publishing, including legal, economic, design, technological, and related topics. | N | REC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 580 | Practicum | | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 592 | Research | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | N | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUP | 100 | Introduction to Environmental Design | Surveys environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & H & G | Credit is allowed for only ALA or PUP 100 |
| PUP | 190 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| PUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| PUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 200 | Cities in Cinema | Environmental, aesthetic, social, economic, political cultural, and other factors influencing global cities seen through films from around the world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & H & G | |
| PUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 301 | Introduction to Urban Planning | Theoretical and practical aspects of city planning. Interrelationships among physical planning, environment, government, and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| PUP | 361 | Planning Workshop I | Basic site planning and design techniques. Collection and analysis of information and basic planning research. Report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 with C or better; Minimum 45 hours |
| PUP | 363 | History of Planning | Historical overview of western urban and regional planning and planning theory, focusing on the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301 with C or better |
| PUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 410 | Public Participation in Planning | Theory and practice of public participation in planning. Examines and critiques participation techniques and roles of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 412 | History of the City | The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as analytical essays and an in-depth research paper are required in addition to regular tests and quizzes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or HU) & H | Pre-requisites: Minimum 45 hours; Credit is allowed for only APH 414, MIUD 598 (History of the City) or PUP 412 |

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| PUP | 420 | Theory of Urban Design | Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU | Pre-requisite: PUP 301 with C or better |
| PUP | 424 | Planning Methods | Methods for urban planning research. Emphasizes research design, quantitative and qualitative methods, survey research, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: PUP 301 with C or better |
| PUP | 425 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301; Minimum 45 hours; Credit is allowed for only PUP 525 or 425 |
| PUP | 430 | Transportation Planning and the Environment | Overview of transportation planning from the perspective of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 432 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 433 | Zoning Ordinances, Subdivision Regulations, and Building Codes | Analyzes zoning ordinances, subdivision regulations, building codes, and other planning implementation techniques relative to local development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Senior student; PUP 301 with C or better |
| PUP | 434 | Economic Development Planning | Provides a broad overview of urban economic development planning in the U.S. This overview includes the role and goals of economic development planning in today's global information economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L or SB | Pre-requisite: PUP 301 with C or better |
| PUP | 436 | City Structure and Planning | Political structure and organization of government as it relates to planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 441 | Economics of Environmental Planning | Overview of environmental and ecological economics and how their concepts and tools are used in dealing with environmental planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better; Credit is allowed for only PUP 541 or PUP 441 |
| PUP | 442 | Environmental Planning | Environmental planning problems, including floodplains, water quality and quantity, solid and hazardous waste, air quality, landslides, and noise. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 444 | Preservation Planning | History, theory, and principles of historic preservation. Emphasizes legal framework and methods practiced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students. Credit is allowed for only PUP 527 or PUP 444 |
| PUP | 445 | Women and Environments | Examines the role women play in shaping the built environment; ways built/natural forms affect women's lives. Focuses on contemporary U.S. examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | C | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 452 | Ethics and Theory in Planning | Ethics and theory of professional planning practice in urban and regional communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisite: PUP 301 with C or better |
| PUP | 462 | Planning Workshop II | Comprehensive planning. Synthesis of complex data- and community-based analyses. Advanced report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 and PUP 361 with C or better |
| PUP | 465 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| PUP | 481 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| PUP | 482 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 373 or GPH 481; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban Planning undergraduate student |
| PUP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |

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| PUP | 490 | Earliest Cities | Archaeological research on the origins and development of the earliest urban centers around the world. Applies urban theory and comparative analysis. Compares ancient and modern cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: ASB 222 or ASB 223 with C or better; Minimum 45 credit hours; Credit is allowed for only ASB 490 or PUP 490 |
| PUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| PUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| PUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 501 | Planning History and Theory | Comprehensive review of planning profession within a political, governmental, multicultural, and gender framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 510 | Citizen Participation | Theory and practice of citizen participation in planning. Examines and critiques participation techniques and roles of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 515 | International Planning and Development | Introduces globalization, international development, international planning practices and policies, urbanization and urban and regional planning in developing nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 516 | International City Design | Comparative exploration of the physical design and structure of international cities and the social, economic, and cultural forces shaping them. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 520 | Planning Practice, Ethics and Processes | Reviews past and current theoretical developments related to social change perspectives, the role and ethics of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 524 | Planning Methods I | Methods for urban planning research. Emphasizes research design, demographic analysis, forecasting, and survey research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 525 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 425 or 525 |
| PUP | 526 | Historic Preservation Planning Practice | In-depth study of practical applications of historic preservation theory and methods. Overview of the professional work of the preservation field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 527 | Preservation Planning | Explores the field of historic preservation. Overview of its historic development and the principles that guide its professional practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student. Credit is allowed for only PUP 444 or 527 |
| PUP | 531 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 535 or GPH 535 |
| PUP | 541 | Economics of Environmental Planning | Application and limitations of economics in environmental planning and policy making in the United States and internationally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 441 or 541 |
| PUP | 542 | Environmental Administration and Planning | Environmental administration of policies and their relationship to environmental planning practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 544 | Urban Land Use Planning | Theory and methods of urban land use planning, including the rational planning process, comprehensive, functional, and neighborhood plans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only WST 547 or PUP 547 |

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| PUP | 548 | Planning for Sustainable Communities | Theory and applications connecting sustainability sciences and practice to urban environmental planning. Sustainable urban development, restoration, and preservation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 550 | Transportation and the Environment | Examines transportation planning from the perspectives of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 551 | Sustainable Transportation Planning | Discusses the sustainability aspects of transportation planning. Emphasizes nonmotorized transportation, facilities, and public health. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 560 | Principles of Urbanism | Organizing core course for PhD concentration in Urbanism. Gives overview of various perspectives on urbanism to present basic tenets, disciplinary threads, and body of scholarship associated with urbanism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student; Credit is allowed for only GCU 516, SOS 560 or PUP 560 |
| PUP | 561 | Urban Design Workshop | Workshop course focuses on applying knowledge and skills in a "real world" setting, developing meaningful planning and design proposals for existing urban areas. | N | STO | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 562 | Advanced Theory of Urban Design | Study of urban design practice and underlying social, political, and environmental issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 563 | The Politics of Urban Space and Design | Advanced seminar critically examines major intellectual traditions investigating urban form, the production of urban space, and socio-spatial practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 565 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only PUP 465 or 565 |
| PUP | 571 | Socio-Economic Impact Analysis | Theory, methods, and techniques of demographic and economic analysis utilized in urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 573 | Survey Research and Multivariate Statistics | Methods of survey research design and primary data analysis for urban planning applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and PUP 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 575 | Environmental Impact Assessment | Criteria and methods for compliance with environmental laws; develops skills and techniques needed to prepare environmental impact statements/assessments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 576 | GIS Workshop for Planners | GIS as a tool to address large, multifaceted planning problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 577 | Communication and Visualization Tools in Planning | Covers graphic and verbal skills required to effectively communicate planning information and ideas. Emphasizes digital graphics and other computer-based tools and presentation formats, focusing on applying visual strategies and tools most often used by planners to make a persuasive argument. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 579 | Qualitative Research | Covers key qualitative skills and techniques that planners require, including research design and the understanding of validity and reliability issues, case study research approaches, qualitative data collection strategies, and strategies for analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 581 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| PUP | 582 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 581; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Urban/Environmentl Planning MUEP student |
| PUP | 585 | International Field Studies | Organized field study in specified international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student. Credit is allowed for only GCU 485, GCU 586, GPH 485, GPH 585, LAP 485, LAP 585, POR 485, PUP 485 or PUP 585 |
| PUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate student |
| PUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 622 | Planning Methods II: Quantitative Planning Analysis | Methods and models used as the basic quantitative techniques of urban, regional, and environmental planning and policy analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 524 with C or better |
| PUP | 642 | Urban and Regional Economic Analysis | Land use and locational impact of economic activity and the urban real property market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 644 | Public Sector Planning | Urban fiscal problems and public goods provision in state and local governments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | |
| PUP | 701 | Urban Planning Colloquium | Presents and discusses new research findings and methods in urban planning. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 710 | Current Planning Theory and Practice | Explores and critically evaluates planning theories and approaches with the objective of articulating new ideas for planning research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 718 | Econ Dev in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2-3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)Credit is allowed for only LAW 718 or PUP 718 |
| PUP | 724 | Planning Methods for Doctoral Students | Tools useful for urban planning research; emphasis on research design and survey methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| PUP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| QBA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 221 | Statistical Analysis | Methods of statistical description. Applies probability theory and statistical inference in business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | CS | Pre-requisites: MAT 119, 211 or 271 |
| QBA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| QBA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-7 | | |

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| QBA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 502 | Managerial Decision Analysis | Fundamentals of qualitative and quantitative analysis to aid management decision making in a competitive and uncertain environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA student |
| QBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Students only (degree and non-degree seeking) |
| QBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Degree Seeking Students only |
| QBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey Graduate Degree Seeking Students only |
| QBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | |
| QBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| RDG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 291 | Children's Literature | Focuses on selecting and using children's literature and related nonprint media to support the elementary school curriculum. Covers the elements, genres and applications of children's literature as well as the resources available for elementary classroom teachers. Constructs criteria for the selection of trade books for educational and personal use. Also explores the role of digital media in children's literature. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | HU | |
| RDG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 301 | Literacy and Instruction in the Content Areas | Required course for all Secondary Education candidates. Introduces theory and instructional strategies for learning from text across academic disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 322 | Language Literacy 1 in Elementary Schools | Instructional strategies for teaching reading using systematic research-based phonics to aid decoding, vocabulary, and comprehension development; writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |
| RDG | 323 | Literacy Processes in Content Areas | Principles and practices for planning subject matter units of instruction that explicitly address learning with texts across academic disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 413 | Language Literacy 2 in Elementary Schools | Applies literacy strategies, including instruction and diagnostic assessment, literacy lessons with adaptations for diverse learners, extended classroom experiences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 414 | Teaching Reading and Decoding | Emphasizes teaching reading as part of an integrated classroom curriculum. Includes strategies and skills for teaching decoding (phonics), vocabulary, comprehension, study skills, and content area reading. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 440 | Computer Gaming, Learning, and Literacy | Examines the principles of learning underlying well-designed video and computer games. Addresses the literacies involved in such games. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| RDG | 481 | Reading Practicum | | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RDG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| RDG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 505 | Developmental Reading | For classroom and special reading teachers. Specific professional skills in decoding, comprehension, and evaluation. Required for Special Reading Endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 507 | Content Area Literacy | Theory, teaching strategies, and practical application concerning learning from text across subject matter disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 508 | Essential Elements of Elementary Content Area Literacy (K-8) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| RDG | 509 | Essential Elements of Secondary Content Area Literacy (6-12) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 510 | Teaching Writing in the Elementary Classroom | Develops rationale, theory, and related practices for teaching writing in K-8 classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 512 | Theoretical Foundations in Language and Literacy | Introduces theoretical lenses useful in understanding issues in language and literacy education and research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 520 | Essential Elements of Elementary Literacy (K-8) | Intended for practicing teachers, focuses on the development of a comprehensive approach to Reading and Writing Instruction K-8. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 521 | Assisting the Struggling Adolescent Reader | Familiarizes teachers with literacy interests, practices, methods, strategies, and resources to develop and enhance students' enjoyment of learning with texts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 522 | Literacy/Biliteracy Development | Acquaints teachers with first- and second-language literacy research, practice, and assessment in elementary school settings (Spanish-English emphasis). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 530 | Research Issues in Literacy | For graduate students interested in research on major issues related to literacy instruction. Seminar activities include reviewing quantitative and qualitative methods and analyzing literacy research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 531 | Language and Literacy I | Instructional strategies for teaching reading using systematic, research-based phonics to aid decoding, vocabulary, comprehension development, writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College MEd or doctoral student; Credit is allowed for only RDG 531 or SPE 538 |
| RDG | 532 | Language and Literacy II | Applies literacy strategies including instruction and diagnostic assessment, literacy lessons with adaptations for diverse learners, and extended classroom experiences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 533 | Literacy in Secondary BLE/ESL Settings | Examines first- and second-language literacy research, practice, and assessment across content areas in secondary school settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 534 | Literacy in Science and Math | Strategies for improving literacy and learning for middle school students in math and science. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 550 | Practicum Experiences in Elementary and Secondary Reading | Practicum experience utilizing assessment and instructional techniques for classroom settings. See RDG 557 for State of Arizona reading endorsement. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 555 | Formal Measures of Literacy | Understanding the attributes of standardized tests and applying this information to analyze, select, and explore their use. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 556 | Assessment and Procedures in Elementary and Secondary Reading | Techniques for classroom and clinical reading/literacy assessment and instruction. Emphasizes continuous assessment. May be taken concurrently with RDG 550 or 557. Recommended for State of Arizona reading endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 557 | Advanced Elementary and Secondary Reading Practicum | Advanced practicum experience utilizing specialized reading and other assessment and instruction techniques for classroom and clinic settings. Lab sections. Recommended for State of Arizona reading endorsement. May be taken concurrently with RDG 556. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 563 | Children's Literature | Selects and uses children's literature and related nonprint media to support the elementary school curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 565 | Literature for Latina and Latino Children and Adolescents | Selects, analyzes, and utilizes literature for Hispanic and Spanish-speaking children and adolescents. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 581 | Literature-Based Reading Programs | | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 596 | Gender, Culture, and Literacies | Influence of gender and culture on written, oral, and post-typographical texts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 630 | Research in Literacy | For advanced graduate students interested in applied research problems, literature of literacy instruction, and major issues related to literacy research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 634 | Technoliteracies | Online course explores the nature of digital communications and expanding definitions of what counts as text and as literate expression. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | |
| RDG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RE | 302 | Life and Letters of Paul | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Department of Supply Chain Management | 3 | | |
| RE | 584 | Internship | | Y | LEC | Y | CNV | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | |
| REA | 300 | Real Estate Analysis | Applies economic theory and analytical techniques to real estate markets. Topics include law, finance, appraisal, market analysis, investments, development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS or BA student. OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. |
| REA | 331 | Real Estate Finance | Legal, market, and institutional factors related to financing proposed and existing properties. Emphasizes current financing techniques and quantitative methods. Prerequisites: FIN 300; professional program business student. In addition to individual course prerequisites, nonbusiness students must have at least a 2.50 ASU cumulative GPA, a 2.50 ASU business GPA, and 56 earned semester hours to register for any upper-division business course unless otherwise noted. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | |
| REA | 380 | Real Estate Fundamentals | Real estate for the student/consumer with an emphasis on the applied aspects of each area of real estate specialization. Not open to Real Estate majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum cumulative GPA of 2.00; Minimum 56 hours OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| REA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| REA | 401 | Real Estate Appraisal | Factors affecting the value of real estate. Theory and practice of appraising and preparation of the appraisal report. Appraisal techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS or BA student. OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. Credit is allowed for only LES or REA 411 |
| REA | 441 | Real Estate Land Development | Neighborhood and city growth. Municipal planning and zoning. Development of residential, commercial, industrial, and special purpose properties. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS or BA student. OR Non-business students with minimum 56 earned hours and 2.5 ASU GPA, and 2.5 ASU business GPA, OR Non-degree OR Graduate student. |
| REA | 456 | Real Estate Investments | Analyzes investment decisions for various property types. Cash flow and rate of return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS or BA student. OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. |
| REA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| REA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | |
| REA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| REA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 501 | Urban Economic and Real Estate Development Principles | Explores the basic principles of urban economics and their application to real estate decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| RED | 502 | Real Estate Valuation-Finance and Capital Markets | Addresses the concepts of valuation applied to real estate and teaches how to apply these principles. Intermediate- to advanced-level course in mortgage finance, and associated capital market innovations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 691-Real Estate Fin/Analysis or RED 502 |
| RED | 503 | Real Estate Market Analysis | Focuses on market analysis and market data gathering methods, means, and techniques necessary in identifying market opportunities and developing specific market strategies for successful real estate development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 503 or 591 (Real Est Site Analysis/Deg) |
| RED | 504 | Real Estate Site Analysis, Master Planning and Design | Analyzes the physical characteristics of a property, including the site and physical area, legal, political, economic, and financial facts that impact the highest and best use of a property and what can be built upon the property. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 504 or 591 (Real Estate Develop Principles) |
| RED | 505 | Land Use Law and Public Entitlement Process | Covers a basic understanding of the legal and practical zoning and governmental land entitlement process. Examines the legal history, structure, and implications of zoning, as well as the fundamentals of "real life" situations that occur in the entitlement and real estate development field. Provides a broad overview of this process from a legal and development viewpoint, but is not intended to be a comprehensive analysis of all entitlement issues. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 505 or 591 (Mkt Segmentation/Analysis) |
| RED | 506 | Real Estate Law for Developers | Covers the nature of property and the legal system as it relates to purchase agreements, title, surveys, declarations of covenants, defining easements, and licenses among other related topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 506 or 591 (Public Entitlement Process) |
| RED | 507 | Synthesis Project #1 Residential Development | Employs the students learning through application of developing a specific parcel of land. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for RED 507 or 591 (Mkt Segmentation/Analysis) |
| RED | 508 | Real Estate Engineering and Construction | Explores the basic principles of engineering and construction of real estate development projects. Reviews construction technologies within the framework of architectural design and engineering as well as construction means, methods, and systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 508 or 598 (Compar Analys; in Fill Housing) |
| RED | 509 | Advanced Financial Analysis for Commercial Real Estate | Teaches more complex financial analysis of income-producing property, including various decision-making tools such as Monte Carlo, option pricing, assessing alternatives, and how to build these into financial models. Also teaches financial analysis of business structures to determine potential outcomes such as debt and equity structures, waterfalls, claw backs, and other business and ownership concepts. Emphasizes strategic alternatives, assessing risk and conversion events. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 509 or 691 (Contemp Issues Real Estate Dev) |
| RED | 510 | Real Estate Development Business and Project Management | Teaches management of real estate development companies and process. Students learn the various aspects of project management, financial management and project accounting, lending relations and managing loans and pay applications as well as dispute resolution and strategic partnerships. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 510 or 598 (Income Analys; Comm/Retail) |
| RED | 511 | Design of the Built Environment | Teaches the built environment and how that applies to creation of places, market positioning, capturing value and the importance of good design to the business of real estate. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 511 or 691 (Real Estate Dev Project Mgmt) |
| RED | 512 | Real Estate Law for Developers | Teaches issues faced by developers such as various types of financing structures, including special districts, TIF and bond financing. Covers issues and process of raising capital and various forms of securing equity. Discusses private placement memorandums, limited liability companies, partnerships and public private partnerships. Students also learn about environmental law, income tax issues, negotiation, and alternative dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 512 or 691 (Adv Real Estate Finance/Analys) |
| RED | 513 | Advanced Real Estate Engineering, Construction Management and Sustainable D 2 | Covers various construction delivery methods, construction project management and scheduling, construction contracts, mechanics and materialmans liens, and pay applications. Students also learn about sustainability and the built environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Real Estate Dev. Project Mgmt) |
| RED | 514 | Synthesis Project #2 Income Property Development | Through application to a specific problem given by faculty, students work in teams to analyze and seek solutions to development of land for an income-producing property. Students investigate a specific parcel of land, performing due diligence, preparing a market and segmentation analysis, defining highest and best use(s), designing a solution, preparing residual land value analysis, defining a product offering, pricing points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Adv Real Estate Finance/Analy) |
| RED | 515 | Synthesis Project #3 Capstone Project Mixed-Use Property Development | Employs all that the students have learned through application to a specific problem given by faculty. Students work in a team to analyze and seek solutions to development of land for a complex, mixed-use project. Students investigate a specific parcel of land and are required to perform due diligence, prepare a market and segmentation analysis, define highest and best use(s), design a solution, prepare residual land value analysis, define a product offering, price points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 4 | | Pre-requisite: Master of Real Estate Development major; Credit is allowed for only RED 515 or 598 (Ret Analys; High Dens Mix Use) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| RED | 520 | Real Estate Development Business and Project Management Internship | Integrates the knowledge and skills cultivated in the MRED program (real estate business management, creative problem solving, team building, critical analysis and thinking). Helps students secure relevant functional and industry experience by providing hands-on work experience across a variety of internship sites demonstrating the varied and changing demands and possibilities of work within the real estate industry. Uses internship experiences to analyze the shifting landscape of work and to assess potential employment environments and career paths. | N | PRA | N | YGB | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student |
| RED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| RED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| REL | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 111 or REL 111 |
| REL | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| REL | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| REL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| REL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions, beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |

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| REL | 205 | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Credit is allowed for only JST 210 or REL 210 |
| REL | 225 | African American Religion | Introduces the history and development of the African American religious tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| REL | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| REL | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| REL | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| REL | 260 | Introduction to Islam | Examines Islamic beliefs, ceremonies, festivals, and institutions. Assumes no prior knowledge about Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 270 | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 282 | PreHispanic Native Am Wrldviev | Surveys cosmological traditions of indigenous civilizations on the Pre-Columbian American continents | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 300 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| REL | 301 | Comparative Mysticism | Comparative examination of Eastern and Western mystical traditions from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |

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| REL | 307 | Approaches to Religion | Examines the intellectual history of academic study of religion through various theoretical approaches, major themes, and thinkers. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Religious Studies student; ENG 102, 105 or 108 with C or better; REL 207 with C or better |
| REL | 310 | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 312 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| REL | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| REL | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| REL | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 317 or REL 317 |
| REL | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| REL | 319 | Religion, Violence and America | In-depth study of ways in which religion and violence have shaped American history, culture and identity. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 319 or 394 (Religion, Violence & America) |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 323 | African American Religion: A Biographical Approach | Examines the experiences, motivations, and contributions of a number of figures associated with African American religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 324 | Spirituals and the Blues | Multidisciplinary exploration of the African American religious and musical response to the North American diaspora experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 326 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only TCL 328 or REL 326 |
| REL | 330 | Native American Religious Traditions | Presents world views and religious thought through the art, architecture, literature, music, mythology, ritual, and folklore of representative tribes in North America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 331 | History of Native American Religious Traditions | Role of religion in Native American history, including missionization; religious adaptation; and prophetic, messianic, and religious revitalization movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 332 | South American Indian Religions | Introduces the sacred stories, ceremonies, and beliefs of Native South American peoples in their historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 381 or REL 332 |
| REL | 338 | The Daoist Bible: Daode jing | At 5,000 words, the Daode Jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| REL | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only CHI or REL 343 |
| REL | 344 | Religion and Values in Japanese Life | Japanese values expressed in the life and annual cycles of the family, local and national identities, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |

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| REL | 345 | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 346 | Chinese Religions | Examines the history and practices of Chinese religions with particular attention to culture, society, and history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 347 | Religious Pluralism and Conflict in India | In-depth analysis of major Indian religious traditions in historical and contemporary context, with attention to theologies, textual genres, doctrines, rituals, political and cultural expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 24 hours. Credit is allowed for only REL 347 or REL 394 (Religions of India) |
| REL | 350 | Hinduism | Studies diverse forms of Hinduism through its institutions, literature, folklore, art, and architecture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 351 | Buddhism | Doctrines, practices, and institutions of the Buddhist religion, emphasizing its role in the history and culture of Asian societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 352 | Modern Buddhism | Focuses on modern issues related to Buddhism with special attention to colonialism, nationalism, the development of the nation-state and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours. Credit is allowed for only REL 352 or 394 (Modern Buddhism) |
| REL | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 353 or REL 353 |
| REL | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity, Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 354 or REL 354 |
| REL | 355 | Japanese Cities and Cultures to 1800 | Relations among ideas and literary, visual, and performing arts of the ancient aristocracy, medieval samurai, and early modern townspeople. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 356 | Buddhism in America | Examines diverse Buddhist traditions in the U.S. among Asian-American communities and converts to this religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 357 | Theravada Buddhism in South and Southeast Asia | Examines Theravada Buddhist institutions, practices, and communities in ancient and contemporary south and southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 360 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| REL | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| REL | 362 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| REL | 363 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| REL | 364 | Islam in Eurasia and Central Asia | Examines the changing role of Islam in Eurasia and Central Asia through history and interprets current transformations in the region. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 364 or 394 (Islam in Eurasia & Central Asia) |
| REL | 365 | Islamic Civilization | Global historical survey of Islamic cultures and societies up to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better |
| REL | 366 | Islam in the Modern World | Examines the worldwide transformations of Islamic religion, cultures, and societies in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 369 | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 371 | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 372 | Formation of the Christian Tradition | Origins, development, and expansion of Christianity; major themes and tensions from the New Testament world to the beginning of the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better |

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| REL | 373 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better or WST 100 or WST 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| REL | 374 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | 375 | Lost Scriptures, Lost Christianities | Wide diversity of early Christianity and its suppressed and lost texts, which have been found in modern times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS 376 or REL 376 |
| REL | 377 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only HST 371 or REL 377 |
| REL | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours. Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| REL | 379 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 379 or SGS 343 |
| REL | 380 | Theology of Terror | Historical background, theological foundations, and consequences of violent Islamist movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 382 | Magick, Religion and Science | Relationship and conflict among magic, religion and science in the West from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 383 | Origins, Evolution, and Creation | Examines scientific, mythic, and religious ideas relating to origins (particularly human). Place of antievolutionism and scientific creationism in American culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| REL | 385 | Contemporary Western Religious Thought | Introduces contemporary Jewish and Christian thought. Topics include religion and politics, problem of evil, interpretations of God, and feminist theology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 386 | America and the Holocaust | Analyzes the historical and sociopolitical factors that shaped U.S. policy decisions regarding Germany's assault on Europe's Jews. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |
| REL | 387 | Religion and Conflict: Theories and Cases | In-depth study of religion and conflict across multiple traditions and regions. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 24 hours; Credit is allowed for only REL 387 or 394 (Religion and Conflict: Theories and Cases) |
| REL | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: WST 100 or 300 with C or better. Credit is allowed for only REL 390 or WST 390 |
| REL | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | 393 | Religion and Sexuality | Examines what issues are involved in incorporating sexuality into religion and how/why religious traditions seek to control sexuality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395 |
| REL | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST or REL 396 |
| REL | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 401, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |

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| REL | 405 | Problems in Religious Studies | Selected topics in religious studies; involves students in research interests of instructor. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: REL 307 with C or better; Religious Studies major |
| REL | 406 | Religious Studies Capstone I | Develops skills necessary for conducting and presenting in-depth research in the field of religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Prerequisite(s): REL 307 with C or better; Religious Studies major; senior standing |
| REL | 407 | Religious Studies Capstone II | Uses previously developed research to produce original research project in religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 2 | | Prerequisite(s): REL 406 |
| REL | 410 | Judaism in Modern Times | Variety of expressions of Judaism and Jewishness in the modern period. Topics may include American Judaism or religious responses to the Holocaust. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 420 | Religion in American Life and Thought | Influence of religion on American society, culture, and ideas; the distinctive character of religion in America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 427 | American Religious Thought | Thought of representative American religious thinkers, e.g., Jonathan Edwards, William Ellery Channing, Horace Bushnell, and Reinhold Niebuhr. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 430 | Shamans and Mesoamerica | Analyzes process of religious hybridization in Mesoamerica; examines symbolic interpretations of Amerindian religious practice and cosmological concepts of Mesoamerican priests. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| REL | 460 | Studies in Islamic Religion | Issues in the interpretation and understanding of Islamic texts, history, society, culture, and rituals. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 461 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| REL | 470 | Religion in the Middle Ages | Religious aspects of medieval life and thought; variety of forms of dissent, heresy, and reform movements from the 4th to 13th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 471 | Reformation and Modern Christianity | Protestant Reformation to contemporary Christian movements; includes factors in the dissolution of the Medieval Christian synthesis, variety of reform movements and reformation patterns, Catholic counter-reform measures, formation of liberal theology, ecumenical movement, and the World Council of Churches. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 480 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| REL | 482 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only JUS 473, POS 473 or REL 482 |
| REL | 483 | Religion and Science | Investigates the correlation between science and religion as an interdisciplinary study from a historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| REL | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 490 | Senior Thesis | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| REL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| REL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |

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| REL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| REL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 501 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on classical texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 502 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on contemporary texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 503 | Post-Holocaust and Reparative Ethics | Examines ethical possibilities suitable for global coexistence among secular, spiritual, and postsecular perspectives. Considers varied sources for ethical thinking in 20th and 21st centuries: existential ethics, critical theory, race and gender theory, postmodern ethics, and reparative ethics. "Post-Holocaust" ethics refers specifically to philosophy, ethics, and religion after Shoah and coming to terms with unforgivable harm, trauma, genocide, and cruelty. The seminar considers possibilities for hope after the irreparable. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only AEP 502, PHI 494 (Post-Holocaust Ethics), PHI 502, REL 494 (Post-Holocaust Ethics) or REL 503 |
| REL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 581 | Foundations of Ethics I | Studies primary texts of classic ethical theories and their applications to various issues in daily life and the professions. Ethical traditions include some of these frameworks: virtue ethics and natural law ethics, consequentialism and contractualism, deontology and critical communitarianism. Pays attention to the shifting nature of the relation between ethics and religion. In the applied, activity-portion of the course, students investigate real-life ethical issues and examine them from several normative perspectives. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 585 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary postsecular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3-9 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MAS, PHI 550 or REL 585 |
| REL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

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| REL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 603 | Teaching World Religions | Seminar designed to prepare participants to teach a course similar to ASU's REL 100. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Phd or Masters student in Religious Studies |
| REL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 720 | Approaches to North American Religious History | Traces narratives and approaches to imagine and reimagine the "plot" of American religious history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: PhD in Religious Studies student |
| REL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| REL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| REL | | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | |
| REL | | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | |
| REL | | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| REL | | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | |
| REL | | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| REL | | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| REL | | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| REL | | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | |
| REL | | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| REL | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| REL | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| REL | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |

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| REL | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| REL | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ROM | 101 | Elementary Romanian | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 201 | Intermediate Romanian | Continuation of ROM 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 313 | Romanian Composition and Conversation | Develops skills in written Romanian and correct oral expression. Must be taken in sequence with ROM 314. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 201 |
| ROM | 314 | Romanian Composition and Conversation | Continuation of ROM 313. Develops skills in written Romanian and correct oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 313 |
| ROM | 411 | Advanced Spoken and Written Romanian I | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314 with C or better |
| ROM | 412 | Advanced Spoken and Written Romanian II | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314, & ROM 411 with C or better |
| ROM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ROM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ROM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ROM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RTM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| RUS | 101 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 102 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| RUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 201 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 202 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 211 | Basic Russian Conversation | Intensive aural/oral drill to supplement reading and grammatical skills acquired in RUS 101, 102, 201, and 202. Required of Russian majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 212 | Basic Russian Conversation | See RUS 211. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| RUS | 311 | Russian Composition and Conversation | Develops writing ability and oral expression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 312 | Russian Composition and Conversation | See RUS 311. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 321 | Foundations of Russian Literature | An in-depth study from Early Kievan religious writings and the medieval epic "The Lay of Igor's Host", to folklore and 18th Century literary movements in prose, poetry and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 322 | Scandals and Scoundrels: The Nineteenth-Century Russian Novel | An in-depth study of the Golden Age of Russian literature, including novels of Pushkin, Lermontov, Gogol, Khvoshchinskia, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinov'eva-Anibal, Cor'ky, Bely, Ebbel, Mayakovskiy, Platonov, Pasternak, Erofeev, Petrushevskia, and other writers. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105 or 108; Credit is allowed for only RUS or SLC 323 |
| RUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 411 | Advanced Composition and Conversation I | Improves aural discrimination and self-expression in oral and written skills, emphasizing vocabulary building. Subject materials drawn from current post-Soviet-Russian publications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 412 | Advanced Composition and Conversation II | See RUS 411. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 417 | Applied Russian Phonetics | General improvement in the student's language skills through aural/oral training in Russian phonology and an analysis of Russian orthography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 2 | | Pre-requisites: RUS 102 with C or better |
| RUS | 420 | Russian Poetry | Development of Russian poetry from its beginnings to the present, including both native and emigre poets. Topics in criticism and the study of poetics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: RUS 312 with C or better |
| RUS | 421 | Pushkin | Pushkin's poetry, plays, and prose fiction, including Eugene Onegin, The Little Tragedies, Tales of Belkin, Queen of Spades and The Captain's Daughter. Taught in English. Does not satisfy the Liberal Arts and Sciences language requirement for BA degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | |
| RUS | 423 | Dostoevsky and Tolstoy | An in-depth study of Dostoevsky's and Tolstoy's major works, including "Crime and Punishment", "Brothers Karamazov", and "Ana Karenina". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 424 | Tolstoy and War and Peace in Russian Literature and Cinema | In English, course includes Tolstoy's War and Peace, the Sebastopol Tales, and Hadji Murad; Babel's Red Cavalry (Russian Civil War); and classic films of War and Peace, World War II, and the war in the Caucasus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| RUS | 430 | Russian Short Story | Detailed study of representative works of the Russian short story genre. Includes authors from both Imperial and Soviet Russia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: RUS 312 with C or better |
| RUS | 441 | Survey of Russian Culture | Interplay of artistic, social, and political forces in the development of Russian culture from the Kievan period to the present. Exclusive use of Russian language source materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: RUS 312 with C or better |
| RUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| RUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 495 | Russian for Heritage Speakers | Generates professional proficiency by developing advanced communicative and written competency in standard literary Russian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |
| RUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| RUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| RUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| SAO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| SAO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 196 | Study Abroad Office Placeholder | Reserved for undergraduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated by SAO following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program"; participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to an ASU Study Abroad Office program is required. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Office of the Provost | Office of the Provost | 1-12 | | |
| SAO | 494 | International Program Courses | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 596 | Study Abroad Office Placeholder | Reserved for graduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 9 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program"; participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to a Study Abroad program is required. | N | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 598 | International Program Courses | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SBS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 200 | Introduction to Social and Behavioral Sciences | Overview of the social and behavioral sciences, indicating their contributions to society and emphasizing interdisciplinary integration | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SBS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 300 | Interdisciplinary Approaches to Social and Behavioral Sciences | Interdisciplinary approach to the study of social life. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SBS | 301 | Cultural Diversity | Critical analysis of the complexities of the cultural politics of difference in the contemporary United States. Through interdisciplinary and comparative study, examines a range of theoretical and public-popular cultural discourses about the cultural contributions, experiences, perspectives of, by, and about U.S. residents of diverse racial, ethnic, class, gender, sexual, and transnational origins or identities. Analyzes the social conditions and historical precedents that have shaped current diversity concepts and debates, deepening knowledge and understanding of multiple perspectives on these issues and their relevance to social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & C | Pre-requisites: Minimum Junior standing; ENG 102, 105 or 108 with C or better |
| SBS | 302 | Qualitative Methods | Basic methodological issues in the systematic application of qualitative analysis of human social life. Surveys range of qualitative methods used by social and behavioral scientists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 303 | Quantitative Methods | Concepts underlying design and implementation of quantitative research methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 304 | Social Statistics I | Statistical techniques of the social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | |
| SBS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SBS | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SBS | 351 | Population Geography | Demographic patterns. Spatial, temporal, and structural investigation of the relationship of demographic variables to cultural, economic, and environmental factors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: MAT 117,119, 142, 170 or 210 with C or better; Credit is allowed for only GCU or SBS 351 |
| SBS | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB, POS, SBS or SOC 374 |
| SBS | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SBS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 404 | Social Statistics II: Multivariate Analysis | Analysis of variance, multiple regression, dummy variable regression, path analysis, and related topics. Computer application to problem solving. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Pre-requisites: SBS 303 with C or better; SBS 304 with C or better |
| SBS | 410 | Topics in Identity/Difference | Topics which focus on race/ethnic, gender, sexual or cultural identity/difference. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 430 | Topics in Power/Knowledge | Selected topics concerning the effects of political and social institutions on perceptions of politics and political culture. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 440 | Family Studies | Theoretical frameworks for analyzing the development of family systems. Impact of social and economic conditions on family forms. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, POS or SBS 447 |
| SBS | 450 | Topics in Local/Global | Examines links among social, political, economic changes at local, national, global levels. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 460 | Urban Studies | Studies local and global urban issues such as social geography, political economy, culture and social space, urban social diversity. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SBS | 461 | Program Evaluation and Policy Research | Examines design, data collection/analysis, and political/ethical issues in planning and evaluating social programs and policies in community organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: AJS 302, COM 308, PSY 290, SBS 302 or SBS 303 |
| SBS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| SBS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SBS | 490 | Senior Thesis I | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. First part of a six-semester-hour sequence, followed by SBS 491. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 491 | Senior Thesis II | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. Second part of a six-semester-hour sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SBS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SBS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| SBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SBS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SCM | 300 | Global Supply Operations | Resources and information to create and deliver products globally. Interfirm systems and industry supply chains. Customer, producer, and employee perspectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prereq(s): WPC or Nonbus major: ACC 241, 240, 242, 271; CIS 105, 220, 236, CON 251, CSE 100, 180; EGN 221, 231, IEE 380, STP 280; MAT 211, 271; min 2.50 GPA OR Engngng Mgmt major: ACC 241; CSE 110; IEE 380; MAT 266 w/ min C; Credit for OPM 301 or SCM 300 |
| SCM | 301 | Introduction to Modern Global Supply Chain Management | Examines the purchasing, operations, and logistics functions from the customer, producer, and employer perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): non-Business major; minimum 2.00 ASU cumulative GPA; minimum 56 earned hours. Credit is allowed for only SCM 300 or SCM 301 |
| SCM | 303 | Honors Global Supply Operations | Explores the principles, concepts, and tools of supply chain management, with emphasis on how these are applied in the business world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; ACC 241 or ACC 242 or ACC 271, and EGN 221 or EGN 231 with C or better |

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| SCM | 314 | Analytics for Logistics | Focuses on practical tools for real-world decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 300 |
| SCM | 315 | Business Decision Models | Introduces quantitative tools used to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 300 or SCM 303 with C or better |
| SCM | 344 | Applied Logistics Management | Presents a synthesis of the principles in logistics (and supply chain) activities emphasizing the operation and integration of activities such as transportation, inventory, warehousing, facility location, customer service, packaging and materials handling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 300 |
| SCM | 345 | Logistics Management | Logistics and supply chain activities emphasizing integration of transportation, inventory, warehousing, facility location, customer service, packaging, and materials handling. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite: W.P. Carey BS Supply Chain Management major; Pre/Corequisites: SCM 315 with C or better if completed |
| SCM | 354 | Procurement of Services | Management of the supply function for logistics-based organizations. Allows students to better understand the nature of procuring a service, contracting that service and establishing appropriate performance metrics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 300 |
| SCM | 355 | Supply Management | Management of the supply function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 300 or 303 with C or better |
| SCM | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): minimum 60 hours; SCM 300 or SOS 110 with C or better; Credit is allowed for only SCM or SOS 385 |
| SCM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| SCM | 432 | Planning and Control Systems for Supply Chain Management | Planning and control systems for product and service flows in supply chain: production planning, master scheduling, MRP, ERP, inventory management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 345 with C or better; Pre/Co-requisite: SCM 355 |
| SCM | 440 | Quality Management/Measurement | Quality management and measurement, relationships with suppliers and customers, quality awards, certifications, programs, tools for process improvement and cost analyses. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; Pre-requisites: SCM 300 or SCM 303 with C or better |
| SCM | 445 | Advanced Logistics Management | Logistics processes account for approximately 10% of U.S. GDP; therefore, the efficient and effective execution of these processes is critical to supply chain managers in corporations, government entities and nonprofit organizations. Includes an overview of the processes involved, a survey of the institutions and players in the processes, and the analytical tools to evaluate their efficiency and effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 344 |
| SCM | 455 | Research and Negotiation | Current philosophy, methods, techniques for conducting strategic and tactical supply chain research and negotiations. Includes supplier price and cost analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 355 with a grade of C or greater |
| SCM | 463 | Global Supply Chain Management | Supply chain activities in international business with special emphasis on management of transportation, global sourcing, customs issues, and facility location in a global environment. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | G | Pre-requisites: W.P. Carey BS or BA student; SCM 300 or SCM 303 with C or better |
| SCM | 479 | Supply Chain Strategy | Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise systems. Provides a comprehensive perspective of supply chain management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 432 with a grade of C or greater |
| SCM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SCM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SCM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisite(s): Minimum 60 hours |
| SCM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| SCM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| SCM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| SCM | 502 | Operations and Supply Management | Contemporary management issues, including environmental, project, and supply chain management; new product development; quality control; TQM. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey MBA students |

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| SCM | 511 | Integrated Supply Chain Management | Management of sourcing, operations, and logistics as an integrated process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 515 | Decision Models for Supply Chain Management | Decision modeling approaches for supply chain management such as optimization, simulation, and decision analysis. Emphasizes spreadsheet-oriented approaches. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 516 | Introduction to Applied Analytics | Provides a solid foundation and deeper understanding of the use of quantitative modeling tools and techniques to solve problems faced in modern supply chains. Uses Excel workbooks to implement the appropriate quantitative methods, including forecasting demand, determining the capacity of a manufacturing line and the cycle times of parts being processed on the line, and methods to manage inventory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: Business Analytics MS student |
| SCM | 517 | Data-Driven Quality Management | Addresses the use of analytics tools and techniques to enhance the ability of quality management approaches to improve processes. Introduces modern quality management approaches including six sigma and design for six sigma. Covers the define, measure, analyze, improve and control (DMAIC) improvement cycle: the core process used to drive six sigma projects. DMAIC refers to a data-driven improvement cycle used for improving, optimizing and stabilizing business processes and designs. Provides an analytics roadmap to help users work through the DMAIC problem-solving process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: Business Analytics MS student |
| SCM | 518 | Analytic Decision-Making Tools I | Covers the skills and knowledge necessary for mastery of the use of quantitative modeling tools and techniques to support a variety of business decisions. Deterministic optimization techniques, including linear programming, nonlinear programming, integer programming, network models and a brief introduction to metaheuristics. Covers the use of these models for a variety of common business problems. Requires implementation of these models using Excel and standalone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: Business Analytics MS student |
| SCM | 519 | Analytic Decision-Making Tools II | Addresses the skills and knowledge necessary to model situations where uncertainty is an important factor. Covers models including decision trees, queuing theory, Monte Carlo simulation, discrete event simulation and stochastic optimization. Uses these models for a variety of common business problems. Requires implementation of these models using Excel and stand alone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). Describes each of these methods in detail. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: Business Analytics MS student |
| SCM | 520 | Strategic Procurement | Applies the principles, philosophies, and processes of supply management to the purchasing management process on a global basis and to facilitate the continuous improvement of the purchasing management system. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 502 with C or better |
| SCM | 521 | Supply Management and Negotiation | Selecting, developing, and executing appropriate sourcing strategies and processes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 532 | Supply Chain Cost and Design Issues | Strategic design and development of supply chains. Focus on cost-management tools applied to supply chain design and supplier management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| SCM | 541 | Logistics in the Supply Chain | Critical issues for customer perception of supply chain performance, including inventory planning, transportation, warehousing, information technology, and integrated logistics service. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| SCM | 542 | Logistics, Globalization, and Economic Development | Global trade, global networks and the influence those networks have on economic development worldwide. Exposes geographic, economic and sociopolitical perspectives on these issues and invites students to draw conclusions from an increasingly informed perspective. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502 and 541; Co-requisite: SCM 515 |
| SCM | 545 | Cases in Global Logistics | Capstone experience for students in the MS in Global Logistics program. Synthesizes learnings from previous courses and applies this learning to specific issues that have a major global logistics component. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502, 515, 541 and 542 |
| SCM | 551 | Operations Planning and Execution | Managing the conversion of raw materials to finished goods, including scheduling, work-in-process inventory management, and postponement/customization. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 581 | Management of Technology and Innovation | Technology life cycles, technology forecasting, new product development process, innovation teams, innovation best practices. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 587 | Project Management | Planning, scheduling, and controlling of projects in R & D, manufacturing, construction, and services. Project selection, financial considerations, and resource management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 588 | Strategic Project Management | Overview of strategic project management processes, project planning and control, project portfolio management, resource allocation, management of strategic project partners. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-3 | | |
| SCM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| SCM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SCM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| SCM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |
| SCM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | N | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | |
| SCM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |
| SCN | 250 | Physical Science by Inquiry | Laboratory-based development of concepts and reasoning skills in the physical sciences. Emphasizes open-ended investigations, dialogues between the instructor and individual students, and small group discussions. Helps students think of physical science as an active process of discovery in which they can participate. Helps preservice teachers understand inquiry and develop inquiry skills. Liberal arts students gain experience in the scientific process. Useful for students who wish to improve their science preparation before taking further science courses. Forms foundation for scientific literacy. | N | LAB | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | SQ | Credit is allowed for only SCN 250 or 294 (Physical Science by Inquiry) |
| SCN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 300 | Foundations of Environmental Education | Introduces environmental education, including the philosophy, historical development, resource identification, curriculum development, field trips and other activities designed to provide the structure and development of the field of environmental education. Explores the antecedents to the present-day field and connects the field of environmental education to curricular programs that are an outgrowth of perceived and actual need in the field of environmental education. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 301 | Ecology and Natural History of the Sonoran Desert | Overview of the plants, animals, and geology of the desert ecosystem based on the Arizona K-12 Science Standards. Provides students with basic knowledge of the Sonoran Desert characteristics and its relationship to the total school curriculum. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 302 | Outdoor Education | Develops a meaningful framework for those who wish to enhance their skills in teaching about outdoor education and personal knowledge of the desert. Whether it be for personal challenge, leadership training or professional certification, outdoor education offers all participants the experience, inspiration and encouragement to live more sustainable lifestyles. The best thing you can do for the natural environment is to discover it then show it to others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 303 | Environmental Education Internship | Provides opportunities to learn more about natural sciences and local history; outdoor education and field trip course facilitation and training; individual and group development; facility care and maintenance including landscaping, gardening and carpentry; and the restoration and maintenance of the grounds and teaching materials. Supports and/or develops education projects and programs as outlined by the locations' Educational Outreach office. Various other tasks include: field trip coordination, development of curriculum and classroom materials, hands-on fieldwork, school outreach, off-site outreach events support, and Outdoor Education event support. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): minimum 45 hours |
| SCN | 400 | Sustainability Science for Teachers | Explores the challenges of sustaining human health and well-being on Earth due to human exploitation of natural resources. Seeks sustainable solutions through science, technology and society acting at global and local levels. Covers diverse approaches used by scientists, scholars and practitioners to study and assess human-environment interactions pertaining to sustainability challenges and solutions. Focuses on how to teach sustainability concepts in the K-8 classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to the Professional Program; Credit is allowed for only SCN 400 or 494 (Sustainability for the Elementary Teacher) |
| SCN | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SCN | 480 | Methods of Teaching Physics | Evaluates various approaches to the teaching of high school physics. Preparation of demonstrations and experiments. Organization of a lab. Designed for secondary school physics teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SCN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| SCN | 530 | Methods of Physics Teaching I | Inquiry approach to high school physics teaching. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SCN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SCN | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SCN | | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SEC | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 3 | | Prerequisites: Graduate Engineering major; Credit is allowed for only MAE 588 or SEC 588 |
| SEC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-4 | | |
| SEC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report or publication. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 784 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| SED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 321 | Critical Issues in Secondary Education | Examines perspectives of critical issues in contemporary education and encourages students to think critically and to develop their own viewpoints. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| SED | 322 | Classroom Leadership in Secondary Schools | Theories and practices for managing and maintaining secondary classrooms for learning; strategies for home/school communication; and leadership roles for teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 396 | Clinical Experience I | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 397 | Clinical Experience II | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 464 | Middle-School Curr/Org | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 478 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 480 | Special Methods of Teaching Social Studies | Interdisciplinary approaches; production and collection of materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 481 | English Teaching Methods for Secondary Schools | Instructional, organizational, and presentation methods for English in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 482 | Science Teaching Methods for Secondary Schools | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 496 | Clinical Experience III | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 501 | Introduction to Effective Instruction | Introductory course for certification program in secondary education. Emphasizes developing basic classroom management, instruction, and evaluation. Includes a field assignment of at least 120 hours. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 502 | Equity in Mathematics and Science Education | Introduces equity issues in science and mathematics as they relate to gender, social class, and ethnicity. Examines current research in these areas. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 511 | English/Language Arts Teaching Methods in Secondary School | Instructional, organizational, and presentation methods. This course, which focuses on the general content and pedagogy of Secondary English/Language Arts, is aligned directly with the State of Arizona Professional Teaching Standards and NCTE standards for teaching secondary English. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 512 | Math Teaching Methods for Secondary Schools | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 513 | Science Teaching Methods for Secondary School | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. This course, which focuses on the general content and pedagogy of secondary science, is aligned directly with the State of Arizona Professional Teaching Standards and INTASC Principals. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 520 | Science Methods for Early Adolescence | Examines the interrelationships between theory and practice in teaching science. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 522 | Secondary School Curriculum Development | Social processes, issues, principles, patterns, and procedures in curriculum development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| SED | 523 | Middle School Curriculum and Organization | Overview of the organization, curriculum, and philosophy of the U.S. public school system with emphasis on the middle school. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 527 | Performance Assessment: Classroom Applications | Develops knowledge and skills of evaluating and assessing learning in middle and secondary schools. Introduces methods to assess cognitive, metacognitive, and affective domains. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 528 | Organizing and Managing the Middle/Secondary Classroom | Planning and delivering instruction; organizing and managing classrooms; making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SED | 529 | Dynamics of Effective Teaching | Explores and applies new research regarding learning, motivation, and retention. Has immediate application and results for classroom teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 530 | Introduction to Middle School Concept, Philosophy, and Curriculum | Overview of the concept, curriculum, and philosophy of the U.S. public school system with emphasis on the middle school. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 533 | Middle/Secondary Instruction, Management, and Assessment | Analyses of procedures, methods, techniques, and experiments in teaching in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Must be a graduate student |
| SED | 544 | Creating Classroom Climates | Emphasizes classroom management and instructional strategies for establishing positive classroom climates that facilitate learning. Includes field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 547 | Teaching Mathematics in the Middle Grades (5-9) | Strategies and methodologies to teach mathematics in the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 548 | Teaching Geometry 5-8 | Practical ideas and activities for teaching informal geometry grades 5-8, based on research on how students learn geometry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 560 | Teaching Mathematics with Technology | Strategies and methodologies to teach mathematics with technology, focusing mainly on the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 561 | Teaching Science with Technology | Strategies and methodologies for effective technology-enhanced science classrooms and improved learning. Models student-driven inquiry teaching throughout the course. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 564 | Middle-School Curriculum and Organization | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 576 | Clinical Experience | Applies course content in secondary and middle school science and mathematics classrooms: observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 577 | Issues and Trends in Secondary Education | Analyzes lay and professional reports; problems and issues in American secondary education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 578 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. Postbaccalaureate students only. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 579 | Apprentice Teaching in Secondary Education | Apprentice teaching in secondary school classrooms. Must be taken four times for a total of 9 semester hours. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 722 | Improvement of Instruction in the Secondary School | Evaluates the research; issues and theories related to the improvement of instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Must have earned a C or better in SED 533 |
| SED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| SEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |

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| SEM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |
| SEM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |
| SER | 101 | Introduction to Engineering Design I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Credit is allowed for only SER 101 or EGR 101 |
| SER | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CADD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR 101; MAT 170; Pre or Co-requisite: ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| SER | 105 | Personal Computing Environment | Introduces computing devices and their ethical use for creativity, communication and organizing information; utilizes a range of devices and applications; program-ability for the end-user; approaches for organizing, sharing, securing and communicating information; managing a secure computing environment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| SER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| SER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 200 | Software Engineering I | Overview of the foundations of software engineering, with particular orientation toward software development lifecycle processes (SDLP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 1 | | |
| SER | 215 | Software Enterprise I: Personal Process | Software engineering, personal software processes for individual professionalism; time and defect estimation, yield, and productivity. Software tools. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 200 with C or better |
| SER | 216 | Software Enterprise II: Testing & Quality | Project-centered course covering testing and quality in software engineering; concepts, tools, and methods in testing and quality management; teamwork and communication in software engineering. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 215; Pre- or corequisite(s): CST 230 or SER 222 |
| SER | 221 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| SER | 222 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |
| SER | 232 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Prerequisite(s): CST 100, EGR 101 or SER 101 (or corequisite: CST 100); MAT 117 or higher; Credit is allowed for only CST 150 or SER 232 |

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| SER | 234 | Operating Systems and Networks | Fundamentals of operating systems, process management, scheduling, synchronization techniques and file management. Network technology, topologies, protocols, application control; network and operating system security. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200; SER 232 |
| SER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 321 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| SER | 322 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management) |
| SER | 332 | Introduction to Graphics and Game Development | Foundations of graphics as used in modern rendering and basic principles of the game development pipeline. Graphics and math concepts and their application in games, graphics and visualization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 |
| SER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 401 | Computing Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: Senior standing; BS Applied Computer Science or BS Software Engineering major |
| SER | 402 | Computing Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 401 |
| SER | 421 | Web-Based Applications and Mobile Systems | Distributed Web and mobile applications, their design, architecture and supporting technologies; user-interaction concepts and technologies; design and implementation of software servers for Web and mobile systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 321 |
| SER | 422 | Web Application Programming | Design and implementation of Web application. Languages, frameworks, technologies, tools and methods used to realize Web client and server solutions. Approaches for securing, testing as well as determining the quality and reliability of Web applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 433 (or SER 322); SER 421 |
| SER | 423 | Mobile Systems | Mobile applications, their architecture, design, and supporting technologies; mobile device operating systems and frameworks; synchronizing mobile applications, support for inter-application data-exchange; accessing and manipulating special-purpose device capability such as location, orientation and input modality. Practices for securing mobile runtimes and optimizing run-time performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 421 |
| SER | 431 | Advanced Graphics | Topics in real-time rendering and graphics hardware. Uses graphics processing unit hardware to implement rendering of higher-order surfaces and special effects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 332 |
| SER | 432 | Game Engine Architecture | Functional requirements of a modern game engine architecture. Students work in teams to develop advanced features for a game engine. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 or SER 321 |
| SER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | |
| SER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| SER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SER | 501 | Advanced Data Structures and Algorithms | Advanced algorithms and how they are effectively applied to solve problems. Algorithm design, analysis, classification, optimization, and application. Practice implementing and employing algorithms to solve realistic problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 502 | Emerging Languages and Programming Paradigms | Emerging programming languages, their design, description, implementation, and advanced features; API design, including facilities for creating secure distributed applications, facilities supporting software services, naming and composition; language paradigms and the resulting implications on execution; run-time systems and storage management; approaches to compilation and execution. Requires ability to program in an object-oriented programming language and knowledge of data structures, algorithms, and analysis. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 515 | Software Enterprise: Inception and Elaboration | Project-centric course focusing on the relationship of software processes to entrepreneurship and business processes; requirements specification and requirements analysis; study of the context and evolution of the software enterprise. The first of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Master of Computing Studies or Software Engineering MS student |
| SER | 516 | Software Enterprise: Project and Process Management | Project-centric course focusing on software process, project management, and technical leadership. Study of the context and evolution of software enterprise project management. The second of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 515 |
| SER | 517 | Software Factory I | First in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Masters of Computing Studies or Software Engineering MS student |
| SER | 518 | Software Factory II | Second in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 517 |
| SER | 520 | Computer Architecture | Basics of computer architecture. RTN, RISC, CISC concepts; computer arithmetic; ALUs; memory systems; I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Schools of Engineering student; CST 364 (CET 364) OR Graduate, Non-Degree, or Post Bacc student |
| SER | 533 | Database-Centric Enterprise Applications Development | Solutions for enterprise software systems based on relational database technology. Persistence solutions in middleware frameworks, QIR, XML, and scalability issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0; CST 433 |
| SER | 540 | Internet-Enabled Embedded Devices | Accessing hardware devices through Internet, including Applets, HTTP, custom byte streams, XML-RPC, SOAP. Building network-based applications that interface hardware. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 with C or better |
| SER | 552 | Digital Systems Design | Digital system design techniques and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CST 452 |
| SER | 554 | Distributed Computing | Topics in distributed systems, including communications, distributed operating systems, fault-tolerance, and performance issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 556 | Distributed Applications for Windows Platforms | Distributed Web-based applications using Windows frameworks such as .NET. Essential components, XML, remoting, Web services, windows services, user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); CST 420 with C or better |
| SER | 557 | Embedded Applications Development | Current trends in embedded system development using C, assembly, and special purpose hardware. Development versus target environment issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 566 | Principles and Practices of Operating Systems | Principles and practices of operating systems: virtual memory systems, I/O devices and systems, file systems and organization, and other topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 576 | Embedded Real-Time Programming | Topics in real-time embedded operating systems such as synchronization, communications, file systems, and memory sharing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0 |
| SER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 586 | Digital Modeling Techniques | Digital system modeling and simulation using hardware description languages. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SES | 100 | Introduction to Exploration | Science and engineering of Earth, solar system, and space exploration. Experimental design, engineering design, teaming; the professions of science and engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher or Pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |
| SES | 106 | Habitable Worlds | Are we alone in the Universe? If so, why? If not, where are our cosmic cousins? Such questions, once the domain of science fiction, are on the verge of being answered with science facts. Astronomers are discovering planets around other stars. Planetary scientists are exploring the worlds in our solar system. Biologists are unlocking the secrets of metabolism and evolution. Geoscientists are determining how the Earth supports life. And as we struggle to build a sustainable future for ourselves, all of us are finding out how technologically advanced civilizations rise and how they might fall. This course surveys these topics. In the process, students master basic concepts from across the major areas of science and learn what makes the Earth a habitable world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | |
| SES | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| SES | 121 | Earth, Solar System, and Universe I | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher. Pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |
| SES | 122 | Earth, Solar System, and Universe II | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre/ Co-requisite: SES 121 with C or better if completed |
| SES | 123 | Earth, Solar System, and Universe Laboratory I | Studies astronomical and geological processes through observations and measurements. Requires field trips and evening telescopic observing. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Corequisite(s): SES 121 with C or better if completed |
| SES | 124 | Earth, Solar System, and Universe Laboratory II | Studies astronomical and geological processes and life through observations and measurements. Requires field trips and evening telescopic observing. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): SES 123 with C or better. Pre- or corequisite(s): SES 122 with C or better if completed |
| SES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| SES | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 311 | Essentials of Astrobiology: Exploration for Life in the Universe | Origin and evolution of life on Earth. Strategies to explore for life in the cosmos. Possible field trips to explore regional geological analogues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): BIO 181 (188), CHM 113 or PHY 121; MAT 265 or 270 |
| SES | 330 | Practical Electronics and Instrumentation | Applied principles of electronics and mechanical design as used by the modern instrument builder, using a systematic approach to the design process: Identify a scientific problem, develop specifications necessary to solve the problem, develop a prototype solution, test solution for plausibility, break down problem into components, design and build the solution then test in a relevant environment. Builds on introduction to circuits and engineering concepts from prerequisite courses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | | Pre-requisites: PHY 131 and 132 with C or better |
| SES | 350 | Engineering Systems and Experimental Problem Solving | Introduces integration of scientific and engineering computational methods into scientific research and successful exploration. Provides an active, project-based environment for learning science and engineering by means of a common set of computational tools. Also provides a detailed overview of procedural and object-oriented programming with an emphasis on problem solving. Students solve problems by developing software in an interpreted language (Python). Problems may include visualizing data, interfacing with hardware, or solving numeric problems. Covers procedural programming concepts including data types, variables, control structures, arrays, and data I/O. Covers object-oriented programming concepts including object creation and use, object interaction, and the design of simple classes. Covers software engineering concepts including testing, incremental development, understanding requirements, and teamwork. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): MAT 267, 272 or 275; PHY 131 and 132 (or 151) with a grade of C or better |
| SES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 405 | Exploration Systems Engineering | Provides an introduction to systems engineering with an emphasis on the following topics: the systems engineering process, requirements, design fundamentals, subsystem fundamentals, trade studies, integration, technical reviews, case studies and ethics. Prepares the student for the capstone spacecraft/mission design course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): SES 330 and SES 350 with C or better |
| SES | 410 | Senior Exploration Project I | Design and development of an Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; Senior standing |
| SES | 411 | Senior Exploration Project II | Continuation of SES 410. Development of Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; SES 410 |

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| SES | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| SES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SES | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| SES | 499 | Individualized Instruction | | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| SES | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics; highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SET | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics; highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| SET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SGS | 101 | Thinking Globally: The Individual and Authority | Examines the changing notions of the individual and authority over history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| SGS | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| SGS | 111 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| SGS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| SGS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 202 | Technology and Nature in World Settings | Examines changing interactions among humans and nature, geographic systems, global demography, and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | |
| SGS | 203 | Contemporary Global Trends | Gives a grounding in patterns of international politics and global social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| SGS | 204 | Professional Global Career Development | Orients the student to working in global contexts and to thinking critically about careers in the global arena. Focuses on working in organizational settings distinctly global. Three modules: nation-state, corporations, and working international organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Pre-requisites: Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| SGS | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| SGS | 294 | Special Topics | | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 301 | Principles of Global Studies | Presents current debates about globalization and subjects these to critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SGS | 303 | Global Trends | Analyzes the process of globalization across boundaries through the investigation of the determinants and ramifications of globalization from the vantage of modern social sciences. Students are expected to conduct and articulate independent critical analyses toward a more in-depth understanding of this social phenomena, global history, and particularly the global economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisites: Minimum 30 hours; ENG 102 with C or better |
| SGS | 305 | Research Methods | Broad introduction to social science research methodology and design, particularly the methods used to analyze global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L | Pre-requisite: SGS 101 (or 301) with C or better; Credit is allowed for only POS 301 or SGS 305 |
| SGS | 310 | Global Urban Systems | Comparative approach focuses on relationship between development of comparative urban systems and environmental impacts at local, regional, global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: SGS 101 or 301 with C or better |
| SGS | 311 | Urbanization in China | Explores contemporary and future Chinese urbanization from economic, built form, and environmental perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |

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| SGS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SGS | 320 | Mechanisms of Governance | One of the fundamental issues in the social sciences concerns the problematic attainment of social order, which is the principal aim of governance. Presents the five principal mechanisms purported to account for social order, and illustrates these by providing empirical examples of each; includes film clips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |
| SGS | 321 | International Institutions and Global Governance | Provides an in-depth examination as to how the international community organizes itself, through international institutions, to deal with serious international issues, and how the institutions of international governance can be improved. Studies diverse examples of international institutions primarily from the perspective of international relations (IR) theory and the role of international law (IL). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 321 or 394 (International Institutions) |
| SGS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 325 or SGS 325 |
| SGS | 330 | Globalization and the Environment: Problems and Solutions | Assesses the impact of globalization on the earth's environment. Examines such issues as biodiversity loss to pollution to urbanization to climate change, among others, and assess how globalization has driven, impacted or improved these environmental problems. Emphasis on understanding the social, political and economic factors that have contributed to global environmental change and the degree to which globalization processes are something 'new', as well as on examining the ability of communities, nations and transnational institutions to manage these global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; 30 completed hours |
| SGS | 340 | Violence, Conflict and Human Rights | Interdisciplinary examination of the evolution and role of human rights in global society. Major themes include the political struggles over enforcement of human rights and curtailment of violence against individuals. Pays close attention to the role of non-governmental organizations and diplomacy in advancing human rights norms and also examines America's role in human rights, both at home and abroad. Focuses on the causes and effects of violence and human rights abuses in the context of torture, the "war on terror," and crimes against humanity. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108; SGS 101 (or 301); 30 minimum hours; Credit is allowed for only SGS 340 or 394 (Violence/Conflict/Human Right) |
| SGS | 341 | Humanitarian Crisis and International Intervention | Focuses on political, legal, and ethical issues raised by decision about military interventions in genocide and humanitarian crisis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 343 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only SGS 343 or REL 379 |
| SGS | 344 | Facing the Past: Truth, Memory, Denial After Atrocities | The past has never been so present as it is today. Over the last two decades, the world has shown an increasing interest in uncovering the hidden and forgotten histories of state-sponsored atrocities and acknowledging the fate of victims and survivors. Studies this movement for the recovery of truth, memory, and moral responsibility includes a wide range of actors and takes a number of different forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 350 | Economic Development and Globalization | Major issues and models in economic development. Studies development policy and foreign aid practiced since the 1970s and recent critique of these practices. Analyzes the mistakes made in the last 40 years, and potential for improving the practice of foreign aid. Contemporary issues in development economics, including the impacts of bad governance, foreign aid, corruption, war, military intervention and democracy on economic growth with emphasis on policy evaluations in health, education, microfinance and monitoring corruption. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 350 or 394 (Prin of Econ Dev Global) |
| SGS | 360 | Cultural Aspects of Globalization | Cultural aspects of globalization, starting with a theoretical discussion of what culture is and then weaving this discussion into an empirical examination of UNESCO's World Heritage program as a practical means of studying the role of culture in globalization. A number of questions guide our inquiry: What is culture? What forms does it take? Can culture be preserved? If so, what are the consequences? How is the UNESCO World Heritage Program structured? How does it conceive culture? What is its understanding of the global and the role of the local in it? | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; SGS 101 or 301; Minimum 30 hours; Credit is allowed for only SGS 360 or 394 (Cultural Aspects of Globalization) |
| SGS | 366 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| SGS | 381 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |

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| SGS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 441 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| SGS | 442 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Sharia, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| SGS | 454 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| SGS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| SGS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| SGS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SGS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| SGS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | | |
| SGS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| SHS | 101 | American Sign Language I | Basic receptive/expressive conversational skills; basic grammar and syntax rules. Orientation to deafness and deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | |
| SHS | 102 | American Sign Language II | Further development of receptive/expressive conversation skills in ASL; finger spelling. Continued exploration of deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 101 with C or better; taken within the past two years |
| SHS | 105 | Introduction to Human Communication Disorders | Introduces hearing, language, and speech problems in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | Prerequisite(s): Freshmen; maximum 25 earned hours |
| SHS | 201 | American Sign Language III | Continued development of fluency in ASL with emphasis on more abstract concepts and the ability to narrate events. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 102 with C or better and taken within the past two years |
| SHS | 202 | American Sign Language IV | Further development of fluency in ASL with emphasis on literature, folklore, and signing narratives with multiple characters. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 201 with C or better and taken within the past two years |
| SHS | 250 | Introduction to Phonetics | Introduces English phonetics with emphasis on phonetic transcription, articulation, phonology, and disorders of speech. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 310 | Anatomical and Physiological Bases of Speech | Noncadaveric study of anatomical systems that underlie human speech and language, including respiration, phonation, articulation, and related nervous system processes. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY 101 |
| SHS | 311 | Hearing Science | Studies the physical characteristics of sound and of the structure and function of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY101; SHS 105 |
| SHS | 350 | Brain Memory and Language | Covers memory and language and their associated brain areas, and the resulting behavioral consequences of injury and disease. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 367 | Language Science | Normative aspects and integration of language structure, comprehension, and production in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | |
| SHS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 375 | Speech Science | Normative aspects of speech, hearing, and language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310; SHS 311 |
| SHS | 376 | Psychoacoustics | Introduces acoustics, cochlear anatomy and physiology, and the perception of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SHS | 401 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311; Credit is allowed for only SHS 401 or 501 |
| SHS | 402 | Clinical Methods and Treatment of Communication Disorders | Principles and techniques for planning speech and language intervention, including observation experiences. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 250, 465 |
| SHS | 461 | Accent Modification | Increases speech intelligibility in non-native English speakers by changing their English pronunciation skills. International students learn the pronunciation of American English vowels and consonants, intonation and stress patterns, and rhythm of speech. Conducts pre- and post-assessments of the students' intelligibility to determine the need for improvement on specific sounds and speech patterns. | Y | LEL | Y | YGB | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): minimum 45 hours |
| SHS | 465 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | Credit is allowed for only SSH 465 or 565 |
| SHS | 470 | Developmental Speech and Language Disorders | Introduces the nature of speech and language disorders in children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 465 |
| SHS | 473 | Implementation of Treatment Plans for Individuals with Communication Disorders | Students will learn to follow written treatment plans, individual education programs, individual support plans or protocols developed by the supervising speech-language pathologist. Opportunities to learn methods for eliciting therapy targets and to apply critical thinking and problem solving during therapy will be provided. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 483 | Professional Issues and Ethical Considerations for the SLPA | Studies licensure laws, professional conduct, and ethical practice in the field of speech language pathology. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 485 | Acquired Speech and Language Disorders | Introduces acquired speech and language disorders across the lifespan. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310 |
| SHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 496 | Aural Rehabilitation | Approaches to aural rehabilitation of children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311, 375 and 401; Credit is allowed for only SHS 496 or 596 |
| SHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-7 | | |
| SHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | |
| SHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | Prerequisite: MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 501 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311 with C or better; Credit is allowed for only SHS 401 or 501 |
| SHS | 502 | Basic Audiometry | Covers the bases, purposes, rationales, and procedures for the core clinical tests of auditory function in adults and children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 504 | Amplification I | Operation, electroacoustic measurement, selection, and prescriptive fitting of amplification devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 505 | Survival Sign Language | Facilitates effective manual and alternative methods of communication with deaf individuals in clinical settings. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 508 | Pediatric Audiology | Emphasizes the principles and procedures for early identification and management of congenital and early-onset hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 510 | Amplification II | Verification and validation of hearing aid performance, benefit, and satisfaction. Fitting considerations for pediatric and geriatric populations. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 511 | Auditory Perception by the Hearing Impaired | Psychophysical methods and behavioral aspects of hearing, with an emphasis on the perceptual consequences of sensorineural hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 512 | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 513 | Neurophysiology of the Auditory System | Focuses on the neurophysiology of the normal auditory system and on changes associated with hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |

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| SHS | 515 | Instrumentation and Calibration | Electronic instruments used to produce, modify, and measure characteristics of sound. Measurement standards and methods for calibration of audiologic equipment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 516 | Auditory Evoked Potentials | Electrophysiologic assessment of the peripheral and central auditory nervous system. Lecture, lab. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 517 | Balance Assessment | Clinical analysis and treatment of balance disorders and dizziness. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 518 | Auditory Rehabilitation | Study and clinical application of assistive technology and rehabilitative services for managing the effects of hearing impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 519 | Auditory Pathologies and Disorders | Familiarizes students with major diseases, pathologies, and disorders of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 520 | Auditory Pathologies/Disorders and Otoneurologic Applications | Familiarizes students with major pathologies and disorders of the human auditory system. Examines advanced otologic, neurologic, and audiologic approaches in the differential diagnosis and treatment of peripheral and central disorders of the auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 521 | Auditory Aging | Focuses on aging and related effects on the auditory system and audition. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 522 | Hearing Conservation/Instrumentation | Examines the prevention, identification, physiologic effects, and management of hearing loss due to noise exposure. Incorporates measurement standards and methods for calibration of electronic audiologic instruments used to produce, modify, and measure characteristics of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 523 | Advanced Audiometry | Discusses assessment and intervention procedures beyond the basic audiologic test battery and for special populations. Examines relevant new audiologic tests and procedures. Prerequisites: SHS 502, 513; SHS major. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS major; SHS 502 and SHS 513 |
| SHS | 524 | Counseling in Communication Disorders | Theories of counseling emphasizing the psychological and emotional impact and management of individuals with communication disorders and their families. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 525 | Audiology Practice Management | Business practice issues, quality assurance, and professional ethics for the practicing audiologist. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 526 | Launch to Clinical Methods in Audiology | In Launch-to-Clinic, students rotate through on-campus observations and group orientation to the ASU Speech and Hearing Clinic. Students learn the policies and procedures of the ASU Speech and Hearing Clinic, software specific to the clinic operations, report writing, and clinical documentation with practice to develop the skills needed to succeed in subsequent clinical rotations both on and off campus. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): Audiology major. Credit is allowed for only SHS 580 (Audio Clinical Observation), and (Audiology Observation) |
| SHS | 530 | Development, Assessment, Intervention: Conception through 3 years | Covers development of children from conception to 3 years of age with a focus in early intervention. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 538 | Clinical Methods in Speech-Language Pathology | Provides the knowledge and skills in clinical methods for treatment and diagnosis in speech-language pathology. Topics cover essential information to participate in screening and prevention opportunities, to structure and implement therapy goals and strategies, to apply for internships, and to administer and interpret informal and formal diagnostic tests. | Y | LEL | Y | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. |
| SHS | 539 | Professional Issues in Speech-Language Pathology | Covers professional issues in speech-language pathology to ensure that students meet the professional knowledge requirements set forth in the American Speech-Language-Hearing Association (ASHA) certification standards. The topics cover essential information that the student needs to have in order to meet graduation requirements, comply with ASHA's ethical requirements, complete ASHA certification requirements, comply with Arizona state licensure requirements, prepare for a Clinical Fellowship Year and be involved in education and advocacy for the profession of Speech-Language Pathology. | N | LAB | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. Credit is allowed for only SHS 539 or SHS 580 (SLP Professional Issues) |
| SHS | 540 | Development, Assessment, Intervention: Preschool | Covers development, assessment and intervention of children from 3 years to 6 years of age, with a focus on preschool education. It includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also it addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 530 |
| SHS | 550 | Development, Assessment, Intervention: School-Age Children | Covers development, assessment and intervention of children from 6 years to 21 years of age, with a focus on school education. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language, reading, writing and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 540 |
| SHS | 552 | Physiological Measures of Auditory Function | Focuses on the measurement of otoacoustic emissions and acoustic immittance. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |

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| SHS | 555 | Cochlear Implants | Covers the research and clinical aspects of cochlear implantation with a focus on the principles of speech coding strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 560 | Development, Aging, Assessment, Intervention in Adults | Covers development, aging, assessment and intervention in adults with a focus on the elderly and the contexts for their service delivery. Includes changes in the adults related to anatomy, neurophysiology, cognitive, motor, perceptual, speech, language, literacy and hearing aspects. Also addresses service delivery models in different contexts where elderly and young adults with acquired disabilities are served. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 550 |
| SHS | 565 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Credit is allowed for only SHS 465 or SHS 565 |
| SHS | 567 | Neural Bases of Communication Disorders | Neuroscience and its application to matters of normal and disordered communication. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 570 | Communication Disorders and Multicultural Populations | Studies racial and ethnic biases and the communication behaviors and disorders in various cultural groups. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 571 | Augmentative Communication and Language Programming | Focuses on individuals across the age span who are unable or who are at risk for being unable to communicate with spoken language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 572 | Language Assessment and Intervention in Infants and Toddlers | Focuses on the birth to 3-year-old population who are at risk for or who have communication and language disabilities. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 573 | Language Assessment and Intervention with School-Age Populations | Focuses on later language development, linguistic demands of academic settings, assessment and intervention strategies for older children and adolescents. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 574 | Management of Voice and Swallowing Disorders | Focuses on assessment and intervention of people with voice, swallowing, and craniofacial disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 575 | Aphasia and Related Neurogenic Language Disorders | Assessment and treatment of acquired neurolinguistic impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 576 | Neuromotor Speech Disorders | Evaluation and treatment of the dysarthrias and apraxia of speech. Emphasizes acquired adult disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 577 | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 579 | Feeding and Swallowing Disorders Across the Lifespan | Focuses on individuals across the age span who have feeding and/or swallowing disorders. Presents assessment and treatment strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 580 | Clinical Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 581 | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 582 | Differential Diagnosis of Communication Disorders | Procedures for assessing speech/language disorders in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 584 | Clinical Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 585 | Articulation and Phonology: Assessment and Intervention | Assessment and treatment of developmental articulation and phonological disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 587 | Language Assessment and Intervention with Preschool Populations | Focuses on preschool language disorders and assessment and intervention strategies for preschool children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | SEM | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SHS 588 or APL 588 |
| SHS | 589 | Audiology Grand Rounds | Grand Rounds bridges clinical and academic knowledge through case studies, application of emerging research, and clinical workshops. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 596 | Aural Rehabilitation | Approaches to aural rehabilitation in children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Credit is allowed for only SHS 496 or 596 |
| SHS | 597 | Bilingual Speech-Language Pathology | Reviews speech and language assessment and intervention practices with bilingual populations from infants to adults. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SHS | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SHS | | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | Prerequisite(s): Freshmen; maximum 25 earned hours |
| SHS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | | Language Science | Normative aspects and integration of language structure, comprehension, and production in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | |
| SHS | | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | | Speech Science | Normative aspects of speech, hearing, and language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310, SHS 311 |
| SHS | | Psychoacoustics | Introduces acoustics, cochlear anatomy and physiology, and the perception of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | Credit is allowed for only SSH 465 or 565 |
| SHS | | Developmental Speech and Language Disorders | Introduces the nature of speech and language disorders in children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 465 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SHS | | Implementation of Treatment Plans for Individuals with Communication Disorders | Students will learn to follow written treatment plans, individual education programs, individual support plans or protocols developed by the supervising speech-language pathologist. Opportunities to learn methods for eliciting therapy targets and to apply critical thinking and problem solving during therapy will be provided. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | | Professional Issues and Ethical Considerations for the SLPA | Studies licensure laws, professional conduct, and ethical practice in the field of speech language pathology. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Acquired Speech and Language Disorders | Introduces acquired speech and language disorders across the lifespan. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310 |
| SHS | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SHS | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | | Aural Rehabilitation | Approaches to aural rehabilitation of children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311, 375 and 401; Credit is allowed for only SHS 496 or 596 |
| SHS | | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | |
| SHS | | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | Prerequisite: MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311 with C or better; Credit is allowed for only SHS 401 or 501 |
| SHS | | Basic Audiometry | Covers the bases, purposes, rationales, and procedures for the core clinical tests of auditory function in adults and children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Amplification I | Operation, electroacoustic measurement, selection, and prescriptive fitting of amplification devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Survival Sign Language | Facilitates effective manual and alternative methods of communication with deaf individuals in clinical settings. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | | Pediatric Audiology | Emphasizes the principles and procedures for early identification and management of congenital and early-onset hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Amplification II | Verification and validation of hearing aid performance, benefit, and satisfaction. Fitting considerations for pediatric and geriatric populations. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | | Auditory Perception by the Hearing Impaired | Psychophysical methods and behavioral aspects of hearing, with an emphasis on the perceptual consequences of sensorineural hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | | Neurophysiology of the Auditory System | Focuses on the neurophysiology of the normal auditory system and on changes associated with hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Instrumentation and Calibration | Electronic instruments used to produce, modify, and measure characteristics of sound. Measurement standards and methods for calibration of audiologic equipment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | | Auditory Evoked Potentials | Electrophysiologic assessment of the peripheral and central auditory nervous system. Lecture, lab. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Balance Assessment | Clinical analysis and treatment of balance disorders and dizziness. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Auditory Rehabilitation | Study and clinical application of assistive technology and rehabilitative services for managing the effects of hearing impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Auditory Pathologies and Disorders | Familiarizes students with major diseases, pathologies, and disorders of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | | Auditory Pathologies/Disorders and Otoloneurologic Applications | Familiarizes students with major pathologies and disorders of the human auditory system. Examines advanced otologic, neurologic, and audiologic approaches in the differential diagnosis and treatment of peripheral and central disorders of the auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | | Auditory Aging | Focuses on aging and related effects on the auditory system and audition. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SHS | | Hearing Conservation/Instrumentation | Examines the prevention, identification, physiologic effects, and management of hearing loss due to noise exposure. Incorporates measurement standards and methods for calibration of electronic audiologic instruments used to produce, modify, and measure characteristics of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | | Advanced Audiometry | Discusses assessment and intervention procedures beyond the basic audiologic test battery and for special populations. Examines relevant new audiologic tests and procedures. Prerequisites: SHS 502, 513; SHS major. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS major; SHS 502 and SHS 513 |
| SHS | | Counseling in Communication Disorders | Theories of counseling emphasizing the psychological and emotional impact and management of individuals with communication disorders and their families. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Audiology Practice Management | Business practice issues, quality assurance, and professional ethics for the practicing audiologist. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Physiological Measures of Auditory Function | Focuses on the measurement of otoacoustic emissions and acoustic immittance. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | | Cochlear Implants | Covers the research and clinical aspects of cochlear implantation with a focus on the principles of speech coding strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Credit is allowed for only SHS 465 or SHS 565 |
| SHS | | Neural Bases of Communication Disorders | Neuroscience and its application to matters of normal and disordered communication. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Communication Disorders and Multicultural Populations | Studies racial and ethnic biases and the communication behaviors and disorders in various cultural groups. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Augmentative Communication and Language Programming | Focuses on individuals across the age span who are unable or who are at risk for being unable to communicate with spoken language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Language Assessment and Intervention in Infants and Toddlers | Focuses on the birth to 3-year-old population who are at risk for or who have communication and language disabilities. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Language Assessment and Intervention with School-Age Populations | Focuses on later language development, linguistic demands of academic settings, assessment and intervention strategies for older children and adolescents. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Management of Voice and Swallowing Disorders | Focuses on assessment and intervention of people with voice, swallowing, and craniofacial disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Aphasia and Related Neurogenic Language Disorders | Assessment and treatment of acquired neurolinguistic impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | | Feeding and Swallowing Disorders Across the Lifespan | Focuses on individuals across the age span who have feeding and/or swallowing disorders. Presents assessment and treatment strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Clinical Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | | Differential Diagnosis of Communication Disorders | Procedures for assessing speech/language disorders in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Clinical Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | | Articulation and Phonology: Assessment and Intervention | Assessment and treatment of developmental articulation and phonological disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Language Assessment and Intervention with Preschool Populations | Focuses on preschool language disorders and assessment and intervention strategies for preschool children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | SEM | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking). Credit is allowed for only SHS 588 or APL 588 |
| SHS | | Audiology Grand Rounds | Grand Rounds bridges clinical and academic knowledge through case studies, application of emerging research, and clinical workshops. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |

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| SHS | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | | Aural Rehabilitation | Approaches to aural rehabilitation in children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Credit is allowed for only SHS 496 or 596 |
| SHS | | Bilingual Speech-Language Pathology | Reviews speech and language assessment and intervention practices with bilingual populations from infants to adults. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SHS | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SLC | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ENG 101, 105, or 107; credit is allowed for only CHI 120 or SLC 120 |
| SLC | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |
| SLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: maximum 25 hours |
| SLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 201 | Introduction to Linguistics | Examines the nature and diversity of world languages, linguistic structures and functions of language, language variation, pragmatics, and language acquisition. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU or SB | |
| SLC | 202 | Introduction to Literary and Cultural Theory | Interdisciplinary approaches to understanding culture and cultural production (literature and critical theory, film, visual art, and performance, among others) in different cultures and regions. Classes are taught by a primary instructor aided by several guest lecturers in their area of academic specialization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 102, 105, or 108 with C or better |

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| SLC | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| SLC | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| SLC | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| SLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| SLC | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskia, and other writers. Taught in English. An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskia, and other writers. Taught in English. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, or 108; Credit for RUS 323 or SLC 323 |
| SLC | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| SLC | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| SLC | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| SLC | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 347, SLC 347 or ENG/HEB/JS/SLC 394 (Modern Hebrew Literature in Translation) |
| SLC | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 348, 394 (Israeli Culture and Society) or SLC 348 |
| SLC | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| SLC | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| SLC | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| SLC | 385 | Career Development for Language Majors | Theoretical and practical aspects of career planning and development; research focus on language-related careers. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101; ENG 102 or ENG 107; ENG 108 |
| SLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 400 | Linguistics | Introduces the analysis of language and its use in social contexts. Topics: morphology, phonology, pragmatics, semantics, syntax, and variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB | Pre-requisite: Junior academic level |
| SLC | 401 | Translation Theory and Practice | Translation theories and professional practices and ethics; bibliography, computer technology, and sample texts for natural and social sciences and humanities. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 415 | Bilingualism and Languages in Contact | Analyzes linguistic aspects of bilingualism, e.g. pidgins and creoles, code-switching, and other contact phenomena; simultaneous/sequential bilingual language acquisition. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 400 |
| SLC | 420 | Foreign Literature in Translation | Not for language majors (except in Asian languages and Russian); open to language majors as a related-area course. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLC | 421 | Japanese Literature in Translation | Readings selected by theme or genre or period from various works of Japanese literature in English translation. May be repeated when topics vary. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | |
| SLC | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| SLC | 440 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |
| SLC | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| SLC | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| SLC | 450 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| SLC | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| SLC | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| SLC | 461 | Feminist Political Writing in Contemporary Europe | Examines the discourse of gender-politics in Central Eastern Europe before and after Soviet hegemony. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 200; ENG 101; ENG 102 (or 105) with C or better, or ENG 107; ENG 108 with C or better |
| SLC | 464 | Politics of Drama in 20th-Century Europe | Interdisciplinary examination of European drama before and after WWII. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 472 | Literature and Politics in Pre- and Post-Communist Europe | Interdisciplinary examination of the cultures of Eastern Europe from WWI to the present. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 200; ENG 101; ENG 102 (or 105) with C or better or ENG 107; ENG 108 with C or better |
| SLC | 476 | Literature and Film in 20th-Century Eastern Europe | Evaluates literary texts and films as a massive propaganda machine of the totalitarian state. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 479 | Introduction to Teaching Foreign Languages | Introduces teaching methodologies, language learning, and current best practice in teaching foreign languages in U.S. middle and high schools. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 480 | Methods of Teaching Foreign Languages | Teaching foreign languages and literatures at secondary and college levels. Does not meet the Liberal Arts and Sciences General Studies requirement for humanities and fine arts. Required for admission to SED 478. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 479 with C or better |
| SLC | 481 | Technical and Scientific Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as engineering, architecture, agriculture, computer technology, electronics, and physical and biological sciences. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 482 | Business and Financial Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as economics, finance, insurance, management, marketing, accounting, advertising, and real estate. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 483 | Medical and Legal Translation | Resources and strategies for translation of professional texts in subjects such as medicine, nursing, public health, criminal justice, and international law. | N | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 491 | Crossing Languages and Cultures | Interdisciplinary and cross-cultural study in two or more world languages or cultures. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SLC 201 and 202 with C or better |
| SLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | Pre-requisite: minimum 56 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLC | 515 | Second-Language Acquisition | Discusses and applies theories of second-language acquisition. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 400 |
| SLC | 551 | Global Approaches to Translation | Familiarize students with various approaches to translation practice. Examines issues related to the cultural role of translation. Students [re]prepare a translation, justification of translation choices, and discussion of the complexities posed by the translation. Readings address a broad array of translation theories, with most focused on translation as a globally theorized phenomenon in the 20th and 21st centuries. Readings and discussions focus on how one translates, and on translation as a culture-making enterprise inextricably tied to the questions of who translates, in what context, for whom, and to what ends. Students understand translation theories from different eras and cultures; understand how translation is implicated in different forms of intercultural contact (colonialism, commerce, proselytization); gain experience translating texts from a source language into English; and can explain why they translated the way they did. | N | RSC | N | GNA | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SLC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 602 | Literary and Cultural Theory | Trains SILC Ph.D. students in understanding the central role of languages and literatures in the composition of culture. Employs a range of interdisciplinary approaches to various forms of cultural production, specifically as they relate to language, literature, film, visual art, and performance. Through exploration of primary works and foundational theoretical texts, shows students how to question the motivations, aesthetics, transmission, reception, and social control of a variety of works and media. At the center of this analysis stand the critical debates about the nature and definition of the term culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

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| SLV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 304 | Computational Linguistics of Slavic Languages | Information technology and Slavic languages, including Web design, digitalized resources, information retrieval, math/statistical analysis, and PERL. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | CS | |
| SLV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 440 | History of Slavic Languages | Comparative evolution of East Slavic, West Slavic, and South Slavic languages from the earliest record to the standardizing of national languages in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB | |
| SLV | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLV | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLV | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| SLV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLV | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SMC | 520 | Methods and Tools in Applied Cognitive Science | Provides a hands-on approach to understanding and using advanced methodologies commonly implemented in the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 521 | Methods and Tools in Simulation and Modeling | Introduces specific methods and tools used in the field of modeling and simulation, with computer-based experience through both writing and using simulation software. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 540 | Foundations of Applied Cognitive Science | Provides a critical background in the theory and organization of the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 541 | Foundations of Simulation and Modeling | Introduces a wide variety of methodologies utilized by and applications of the broad field of simulation and modeling. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | |
| SMC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | |
| SMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |

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| SMC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshmen; maximum 25 earned hours |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 210 | Sociology of Murder | Sociological perspectives on various forms of murder and types of murderers. Also considers forms of punishment for murder. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 220 | Sport and Society | Examines sports in American society as a source of socialization and an institution where gender, race/ethnicity, and class interact. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Pre-requisite: ENG 101, 105, 107 or 111 with C or better |
| SOC | 270 | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | |
| SOC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 301 | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 321 | Sociology of Work | Social and cultural analysis of industry. Occupational roles, status, and social participation of workers. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | 328 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |
| SOC | 331 | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | 332 | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 333 | Population | Global trends in population growth, composition, and distribution; theories, policies, and impact of population trends on environmental quality and development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 334 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| SOC | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SOC | 340 | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| SOC | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G & H | |

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| SOC | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: 45 earned credit hours; Students who have credit for ASB 353, may not enroll in SOC 353 |
| SOC | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. May be repeated once for credit. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 360 | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | 363 | Men and Masculinity | Sociological analysis of how masculine identity is defined, negotiated, and variously constructed depending upon class, ethnicity, age, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 364 | Popular Culture | Studies the social approaches to popular culture, focusing on the function of various forms (literature, film, theatre, and music). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 366 | Film and Society | Studies the social approaches to film as an art form, mass medium, and ideological construct. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SOC | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 or 102; SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB, SOC, SOS, or SSH 370 |
| SOC | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | GRD | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| SOC | 375 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| SOC | 378 | Migration and Society | Application of social scientific theories and principles in order to understand the social and ethnic consequences of international migration with a focus on the United States. Students will communicate views formulated from empirical evidence and reasoned analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Pre-requisites: ASB 102 or SOC 101 with C or better; 45 minimum hours; Credit is allowed for only ASB 378 or SOC 378 or TCL 378 |
| SOC | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretive analysis. May be repeated for credit when topics vary. Fieldwork practicum. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SOC | 390 | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | CS | Pre-requisite: MAT 142 or higher |
| SOC | 391 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Prerequisites: SOC 101 (or SOC 301 or CDE 232) and SOC 390. Credit is allowed for only FAS 361 or SOC 391 |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 400 | Perspectives on Aging | Broad overview of gerontological issues; e.g., physical aging, retirement, living options, caregiving, theoretical background, death. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 415 | The Family | Family considered from the institutional viewpoint; in-depth look at its historical development and its adaptation to a changing culture; analysis of the family system in many cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | 419 | Organizations and Technological Change | Explores the increasing impact of information technology on corporate, governmental, and private organizations. May involve fieldwork. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| SOC | 420 | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | |
| SOC | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 424 | Women and Health | Women as healthcare workers and an in-depth analysis of issues of health, illness, and healthcare for women | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 426 | Social Inequality | Examines stability and change in social inequality based on age, class, ethnicity, gender, and race. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |

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| SOC | 427 | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 433 | Applied Demography | Science of population analysis. Covers techniques for measuring fertility, mortality, migration, and population composition. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; FAS 101, 331, PSY 101(PGS 101) or SOC 101 with C or better; Credit is allowed for only FAS 435 or SOC 435 |
| SOC | 443 | Sociology of Corporations | Examines corporations as social institutions and the implications of their status as a legal person on politics, culture, and economy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 445 | Globalization, Development, and Resistance | Explores the interconnections among globalization, development, and grassroots movements for social change in Africa, Asia, and Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 446 | Sociology of Crime | Analyzes the process of criminalization, exploring the behavior of the definers of crime, and the behavior of those defined as criminals. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 448 | Epidemics and Society | How epidemics occur; how they are perceived in society; how epidemics affect society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 451 | Comparative Sociology | Cross-cultural study of basic social institutions; the methodology of cross-cultural research. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 456 | Political Sociology | Social factors associated with voting; nature and structure of the electorate and political parties and the nature of national and international power structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SOC | 457 | Global Social Movements | Examines how groups mobilize across borders to pursue social goals, including equality, justice, peace, and salvation in a global context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| SOC | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| SOC | 483 | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 486 | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| SOC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| SOC | 503 | Academic Professional Development | Becoming and working as an academic, including how to write a vita, choose a thesis topic, or find dissertation data. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 504 | Sociology as a Profession II | Becoming and working as a sociologist, including how to write a vita, choose a thesis topic, or find dissertation data. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 505; Graduate students only (degree and non-degree) |
| SOC | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 507; Graduate students only (degree and non-degree) |

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| SOC | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling. Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. Projects involve conducting analyses and writing results. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 508; Graduate students only (degree and non-degree) |
| SOC | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 509; Graduate students only (degree or non-degree) |
| SOC | 512 | Secondary Data Analysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 512; Graduate students only (degree or non -degree) |
| SOC | 515 | Studies of the Family | Current developments in the study of marriage and the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 516 | Family Demography | Current developments in the study of family demography. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 519 | Graduate Medical Sociology | Current developments in medical sociology. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 523 | Social Stratification | Overviews significant themes, issues, and bodies of work in the field of social stratification, a fundamental topic of sociological inquiry. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 533 | Demographic Methods | Emphasizes methods and techniques in demographic analyses such as life tables. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 585 | Sociological Theory | Analyzes major sociological theories, from classical to contemporary. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only FAS 586 or SOC 586 |
| SOC | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |
| SOC | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 587 or SOC 587. Credit is allowed for only FAS 588 or SOC 588 |
| SOC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Pre-requisite: ENG 101, 105, 107 or 111 with C or better |
| SOC | | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| SOC | | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| SOC | | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| SOC | | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| SOC | | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | | Social Inequality | Examines stability and change in social inequality based on age, class, ethnicity, gender, and race. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| SOC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| SOC | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SOC | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SOC | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 100 | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | 101 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | MA | Pre-requisites: MAT 117 with C or better or MAT 194: EFM (with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| SOS | 110 | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |
| SOS | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | HU | Credit is allowed for only SOS, FSE or CEE 181 |
| SOS | 182 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice, rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |

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| SOS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | GRD | School of Sustainability | School of Sustainability | 1-3 | | |
| SOS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | |
| SOS | 201 | Introduction to ASU and Sustainability | Introduces all ASU transfer students to the unique elements, culture, challenges and opportunities of the university. | N | LEC | N | YGB | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: Sustainability major; Minimum 24 hours |
| SOS | 210 | Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| SOS | 211 | Calculus and Probability for the Life and Social Sciences | Introduces two of the most important and useful mathematical frameworks used to study natural and social phenomena: probability and calculus. Probability is used to describe an attitude of mind toward some proposition whose truth is not certain. Calculus is the branch of mathematics used to study the behavior and dynamics of functions; calculus is the mathematical study of change. Students gain the basic competence needed for applying probability and calculus when thinking about and research problems in sustainability. Focuses on and discusses applications, the meaning of important concepts, the origins of the rules of derivation and integration, and logic behind why the methods work. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | MA | Pre-requisite: AML 100 or SOS 101 with B or better |
| SOS | 220 | Systems Thinking | Introduces systems thinking and complexity science, with an emphasis on analytical relevance for thinking about a myriad of issues involved in sustainability. Hones students' abilities to read critically, articulate their views clearly, and think about the many systems that shape their lives. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 230 | Professional skills in Sustainability | Builds interpersonal competence, which is a key competence in sustainability. Students work on a small hands-on sustainability project in order to practice professional skills in four domains: teamwork, project management, self-directed and continuous learning, and stakeholder engagement. Students learn how to effectively collaborate in teams, use project management tools to achieve quality products in time, innovate their ways of learning, and create productive dialogue with stakeholders. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 231 | Careers in Sustainability | Aids in career exploration and development for School of Sustainability majors. Explores values, motivations and career options. Students learn how to approach the job search and how to communicate sustainability to employers; also how to prepare a quality résumé, cover letter, and gain a better understanding of the benefits of networking. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: BA or BS Sustainability major; Minimum 45 hours; PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 101 or AML 100 with C or better |
| SOS | 300 | Advanced Concepts and Integrated Approaches in Sustainability | Integrates disciplinary contributions to sustainability, teaches advanced concepts in sustainability, and explores methods for identifying sustainability challenges and generating solutions. Focuses on diversity of sustainability research, and integrates specialized approaches in sustainability. Advanced concepts in sustainability, including systems-thinking, complexity, nonlinearity, cascading effects, coupled natural-human systems, governance, future thinking, unintended consequences, normative concerns, transformation, power, participation, and equity. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sust minor with SOS 100 (or 110 or SOS 111); PUP 190 with C or better; 6 hrs from two Sust themes OR Civil and Environ Engineering major with a Sust conc OR Tourism major with a Sust Tourism conc OR Interdisc Studies major with a Sust conc |
| SOS | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| SOS | 310 | Equity, Justice and Sustainability | Introduces the "social justice" aspects of sustainability science and practice. Sustainability problems are a special class of problems arising from a complex set of issues spread across time, space and institutional scales. These problems can threaten underlying social, economic and ecological systems which are highly intertwined and interdependent. Explore these issues through study of both theory and practice. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 311 | Future Thinking and Strategies | Offers a critical introduction to future-oriented theories and methods. Explores anticipation in contemporary society through a series of cases studies that probe real-world sustainability issues and how the future is created and contested. By characterizing and critiquing future-oriented practices across governmental, academic and private sectors, offers a critical perspective on different methodological approaches and the implications of their use. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 314 | Basic Energy Science | Explains the concepts of the science of energy for those without a background in engineering. Allows non-engineering students to better grapple with the issues that surround sustainable energy issues. Covers the most common methods of electricity generation as well as renewable technologies and fuels. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SOS 314 or SOS 394 (Basic Energy Science) |

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| SOS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SOS | 320 | Society and Sustainability | Establishes an understanding of the human, social, and cultural dimensions of sustainability from multi- and interdisciplinary perspectives and at a variety of spatial and temporal scales. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 321 | Policy and Governance in Sustainable Systems | Explores the wide array of political questions that are raised when we view the Earth's environment as an integrated, global system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 322 | International Development and Sustainability | Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sustainability or Business (Sustain) major; SOS 110 and 111 (or PUP 190) with C or better; OR Non-Sustain major with 2 courses; SOS 100, 110, 111 (PUP 190), SOS 300 with C or better; Credit is allowed for only SOS 322 or 530 |
| SOS | 323 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 324 | Sustainable Energy, Materials, and Technology | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 325 | The Economics of Sustainability | Applies economic principles to the allocation of environmental goods and services, external environmental effects, and environmental public goods; decision-making under uncertainty, adaptation to and mitigation of environmental change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 326 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning, and the provisioning of ecosystem services; use of economic and other social science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 327 | Sustainable Food and Farms | Food systems and sustainability. Theories of food security, rural livelihood sustainability, and food sovereignty. Critically examines the social, ecological, economic, and institutional dimensions of the many sustainability challenges associated food system activities (production, processing, distribution, consumption, waste). Students develop a food system framework and apply knowledge to an assessment of the sustainability of one aspect of the local food system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 328 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. Delves into more specific case studies of attempts by current businesses to become "greener" and "more sustainable," exploring challenges and opportunities that are commonly found as well as how decisions are often made in today's business settings and by whom. Explores alternative enterprise models and examples of businesses that are using the current context to redefine the sustainability and enterprise. Given the emergent nature of this effort, uses timely and "real-world" examples from current events where possible. Explores and applies an integrated approach to sustainability and enterprise. Readings include popular texts, original research articles and current events. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sustainability or Business (Sustain) major; SOS 110 and 111 (or PUP 190) with C or better; OR Non-Sustain major with 2 courses; SOS 100, 110, 111 (PUP 190), SOS 300 with C or better; Credit for only SOS 328 or 394 (Sustain and Enterprise) |
| SOS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: ENG 102 (or ENG 105/108) with C or better; ASB 100 (or 102), SOC 101, SOS 110 or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SOS | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better; Minimum 45 hours completed; Credit is allowed for only ASB or SOS 371; Students who have received credit for ASB or SOS 394 (Inequality and Sustainability) may not enroll in SOC 371 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 372 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; GLG 101 (or GLG 102 or 110 or GPH 111 or SES 121); MAT 117 or higher. Credit is allowed for only GLG 301 or GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| SOS | 373 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| SOS | 374 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone—in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: (GLG 101 & GLG 103) or (SES 121 & SES 123) with C or better; MAT 170 or higher or PHY 101 or higher or CHM 107 (or 113 or 114), or BIO 100 or higher, all with a C or better. Credit is allowed for only GLG 327 or SOS 374 |
| SOS | 375 | Environmental Anthropology | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and use their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): ASB 100, ASB 102, SSH 100, SOS 100 or SOS 110. Minimum 45 hours. Credit is allowed for only ASB 375, ASB 394 (People, Environment Connections in Anthropology), ASB 494 (Ecological and Environmental Anthropology) or SOS 375 |
| SOS | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Minimum 60 hours; SCM 300 or SOS 110 with C or better. Credit is allowed for only SCM 385 or SOS 385 |
| SOS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SOS | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better. Credit allowed for only ASM, BIO or SOS 424 |
| SOS | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 430 | Sustainable Economic Development and Social Transformation | A clustered learning network on the application of sustainability principles to the evaluation of economic development strategies at the national, regional, and local levels, using case studies. May be repeated once for credit. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 431 | Resilience and Sustainability | A clustered learning network on the application of resilience analysis to the evaluation and management of the sustainability of coupled social-ecological systems using case studies. May be repeated once for credit. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | |

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| SOS | 433 | Sustainable Water Use | A clustered learning network on the problem of water scarce regions, includes insights from hydrology, engineering, biology, economics and public policy. May be repeated once for credit. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: MAT 117 or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| SOS | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210(or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| SOS | 465 | Sustainable Urbanism | History, theory, principles and practice of New Urbanism, including current critiques and counter-critiques of both movements. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| SOS | 480 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Challenges students to explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: SOS 110, 111, PUP 190 with C or better if completed. Credit is allowed for only SOS 480 or 494 (Achieving Career Success in Sustainability) |
| SOS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SOS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | School of Sustainability | School of Sustainability | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 110, and SOS 111 (or PUP 190), with C or better |
| SOS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-7 | | Pre-requisites: Sustainability major; Minimum 9 hours of SOS 320, 321, 322, 323, 324, 325, 326, 327, 328 (or SOS 394 ST: Sustainability and Enterprise), 465 (or PUP 465) |
| SOS | 499 | Individualized Instruction | | Y | SEM | Y | Z1 | School of Sustainability | School of Sustainability | 1-3 | | |
| SOS | 501 | Foundations of Sustainability | Foundations of Sustainability is designed to introduce uniform and civilian leaders to the major challenges in global sustainability: energy and climate change; urbanization; international development; water; biodiversity and habitat conservation; food and agriculture; and, and business and economics. It is also designed to introduce them to the major concepts in sustainability science: systems dynamics; scale; long term development; tradeoffs; and, collaboration and participation. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Global Sustainability Leadership certificate student |
| SOS | 502 | Tools and Techniques for Sustainability | Forthcoming federal legislation and Executive Orders will set new standards for operational efficiencies, energy and water conservation, use of renewable energy sources, and waste minimization in the Army and Army National Guard. Tools and Techniques for Sustainability presents a systems approach to meet those standards by integrating principles of sustainability into existing Army policies, procedures, and reporting systems. The course features the Framework for Sustainable Strategic Development as an organizing framework to analyze systems and develop strategic plans to move toward sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Global Sustainability Leadership certificate student, Pre-or co-requisite: SOS 501 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 503 | Operationalizing Sustainability | Sustainability is a means to addressing the significant physical, statutory, and regulatory requirements that affect and can encumber the Army's ability to train Soldiers at ranges and maneuver areas across the United States. With hundreds of imperiled species proposed for federal protection in the next few years, threatened and endangered species and sensitive habitat will continue to be a concern. Participants in Operationalizing Sustainability will explore how innovative training practices, improved land and natural resource management practices, and enhanced community relationships can ensure continued access to the land and water assets needed to maintain readiness and can help to 'win hearts and minds.' Proactive approaches to promoting well-being for soldiers, families, civilians, neighbors, and communities, both at installations and downrange, are stressed. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 504 | Energy and the Built Environment | Provides practical approaches to applying sustainability principles and practices to public works activities, housing, facilities operations and management, military construction, master planning, and energy management. Presents approaches to implement high-performance sustainable building design, construction, operation and management, maintenance, and deconstruction. Also covers cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 505 | Sustainable Military Acquisition and Logistics | Sustainable Military Acquisition and Logistics provides practical approaches to applying sustainability principles and practices to all areas of procurement, acquisition, and logistics. Through weapon systems acquisition or procurement of installation goods and services, the Army hopes to drive innovation and promote sustainability while reducing costs. The inclusions of energy and resource efficiency and other sustainability criteria in acquisition and procurement decisions can reduce long-term operation and maintenance costs, conserve resources, and continue to expand innovation throughout the supply chain. This course introduces the application of sustainability principles to procurement and acquisition, transportation, and material. The use of life cycle analysis and multicriteria assessment for all 10 classes of supply is also featured significantly in the course. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 510 | Perspectives on Sustainability | University-wide course covering basic perspectives on sustainability. Uses case studies; faculty and students from engineering, architecture, social sciences, and natural sciences exchange ideas on the major challenges faced in forming a sustainable future at the local, national, and global levels. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 511 | Transformational Sustainability Research | Enables students to describe, position, compare, and evaluate the key features, strengths, and weaknesses of sustainability research and problem-solving methods. Introduces an integrated methodological framework for sustainability research and problem solving that maps and structures families of methods from description/analysis to strategy building. Addresses all major families of sustainability methods, critically evaluating their specific function, structure, underlying assumptions, validity, reliability, strengths and weaknesses against this overall framework. The method families include not only scientific methods but also practical problem-solving techniques. Integrates two training programs, one on teamwork skills, the other on participatory collaboration with stakeholders. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 512 | Sustainable Resource Allocation | Microeconomic principles of resource allocation applied to environmental goods and services, external environmental effects and environmental public goods; decision making under uncertainty, adaptation to and mitigation of environmental change. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 513 | Science for Sustainability | Carbon cycle, nutrient cycles, carbon and nutrients in the oceans, climate change, oxygen and ozone, solid waste pollution, urban air pollution. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social data collection methodologies. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GCU or SOS 514 |
| SOS | 515 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 516 | Science, Technology, and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or PAF 547 or SOS 516 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 517 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only SOS 517 or SOS 591 (Sustainability and Enterprise) |
| SOS | 518 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only ASB, BIO 517, BIO 591 (Uncertainty & Decision Making), POS 527 or SOS 518 |
| SOS | 520 | Research Design and Methods for Sustainability | Provides skills and knowledge that help students design their own research and place it in the context of other disciplines or bodies of work. Not a "methods" class because no specific method is taught in depth. Instead, it is an initial introduction to the research design process and is intended as a platform through which students develop the skills to appreciate and contextualize the approaches taken (and methods used) by others, and during which they can identify the types of specific training they require as they define their own research. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre- or corequisite(s): SOS 510; Credit is allowed for only SOS 520 or SOS 598 (Intro Design/Methods) |
| SOS | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 525 | Social-Ecological-Technical Systems (SETS): Domains and interfaces | Guide students in developing an integrated approach and framework for thinking about complex systems in a sustainability context. Presents overviews of content, theories and methods from each of the SETS domains (Social, Ecological and Technical Systems); primarily focuses on how to bring these domains together. Explores the SETS interfaces (intersections) from an integrated perspective and equips students to make those linkages in their research and in subsequent elective courses. Each semester students use a sustainability problem or theme to explore the concepts presented in the course. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 530 | International Development and Sustainability | Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SOS 322 or SOS 530 |
| SOS | 531 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Challenges students to explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Master of Sustainable Solutions student; Credit is allowed for only SOS 531 or 598 (Achieving Career Success in Sustainability) |
| SOS | 532 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): (degree- or nondegree-seeking graduate student. Credit is allowed for only ASB 533 or SOS 532 |
| SOS | 533 | Sustainable Water | Hydrological, legal, political, and ecological implications of alternative water management strategies; effect of institutional and regulatory frameworks; changes in water demand and supply due to human (population growth, economic changes) and natural (drought, climate change) factors | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 534 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 535 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 536 | Food System Sustainability | Broad view of food systems and the sustainability of such systems. Concepts, theory, methods and empirical analyses from diverse disciplines, including agro-ecology, agronomy, political science, agricultural economics, geography, anthropology, and food and nutrition studies. Students choose a theme that is a core concern to food system sustainability and pursue that theme in diverse course activities and through engaging in the broader food system we are embedded in as residents in the Phoenix area. Culminates with a term paper/project that synthesizes experience and knowledge, providing a unique perspective on their role in food systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Prerequisite(s): degree- or non-degree-seeking graduate student. Credit allowed for only AML, ESS or SOS 540 |
| SOS | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibria in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| SOS | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy—especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| SOS | 550 | Introduction to Sustainability and Organizational Strategies | Focuses on organizational strategies for technology companies competing in a global environment. Strategic and tactical decision implications of a life cycle value proposition; modeling and analysis for strategic decisions about products/service bundles and delivery mechanisms; innovation; technology, including the linkages to the firm strategy and empirical evidence; supply, demand, and value chain; research of laws, guidelines and international agreements. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 551 | Water Policy and Management | Covers water policy and management focused on Arizona. Useful to anyone looking for a general background on water issues in Arizona or considering a career in water resources and environmental engineering, planning, or public policy. Divided into three major sections: the history of water resources development and hydrology of Arizona; water management in Arizona; and an examination of current issues and controversies. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only CEE 544 or SOS 551 |
| SOS | 552 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Credit is allowed for only CEE 581 or SOS 552 |
| SOS | 553 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 530 or SOS 553 |

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| SOS | 559 | Sustainable Technology and Management Capstone | Provides opportunity to demonstrate comprehension of the fundamental aspects that have been introduced in the classroom and the synthesis of these fundamental aspects into a demonstrable project that can be presented and defended. | N | STO | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 560 | Principles of Urbanism | Organizing core course for PhD concentration in Urbanism. Gives overview of various perspectives on urbanism to present basic tenets, disciplinary threads, and body of scholarship associated with urbanism. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only ASM, BIO, or SOS 570 |
| SOS | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 581 | Synthesis for Sustainability Research | Engages students in inter- and transdisciplinary problem solving after they have gained depth of training in content areas, integrative approaches and methods. Students link their own research to the broader field of sustainability. Research. | N | RSC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): SOS 510; 520; 525; 579; Co-requisite(s): SOS 596 or SOS 599 |
| SOS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 589 | Community of Graduate Student Scholars | Provides the opportunity to develop new skills, to foster cohort building, to interact with other students and faculty, and to network and build support with the alumni network. Overseen by a faculty member but is primarily directed by the students. All MA or MS students take this course each semester. Although there is an overall structure as demonstrated in the course schedule, the specific content of the course varies each semester depending on the needs and interests of the students. | N | LEC | Y | YGB | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 596 | Scientific Paper | MA/MS students are required to devote six hours to conducting research and writing a scientific paper of publishable quality based on the research. The paper topic, the research methodology, and the written format must be approved by the supervisory committee. Students must decide if they will complete the paper on their own or as a group. | N | RSC | Y | YGB | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Sustainability MA or MS student; SOS 510; SOS 579 |
| SOS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |

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| SOS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |
| SOS | | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that give rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| SOS | | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SP | 431 | Prose of Golden Age | | Y | LEC | Y | CNV | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 111 | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisite: Maximum 25 hours |
| SPA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 203 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 201. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 203 if they have received credit in SPA201, 202, 204, 311, 312,313,314,315,316,325,412 |
| SPA | 204 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 202. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 204 if credit received in SPA 202, 311,312,313,314,315,316,325, or 412 |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 315 | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | 316 | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | 317 | Spanish for the Professions | Advanced-level course that serves as an introduction to the Spanish for the Professions minor or certificate. Develops oral and written skills that prepares students to use their Spanish in their careers and/or professional fields of interest. Also covers several cultural points that facilitate effective interaction with Spanish speakers in the professional world and global community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: SPA 314 or 316 |
| SPA | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: SPA 314 or 316 |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 400 | Introduction to Spanish Linguistics | Introduces the discipline and methods of linguistics through the study of Spanish data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre/co-requisite: SPA 412 or 413; Students who have credit for SPA 400 may not enroll in SPA 539 |

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| SPA | 401 | Spanish Oral Communication for the Professions | Students practice their Spanish oral communication skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students gain practice in speaking varieties of Spanish that would assist their communication with monolingual Spanish-speaking Latino clients in formal (professional) and informal contexts in the public sector. Students gain experience in giving public talks, reporting on cultural events and issues in the Hispanic community, participating in simulated workplace exercises requiring the ability to carry out various language functions appropriately in different contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Oral Comm. for Profes) may not enroll in SPA 401 |
| SPA | 402 | Written Communication for the Professions | Students hone their Spanish literacy (reading and writing) skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students read and understand documents in Spanish that they would come across in the process of assisting monolingual Spanish-speakers in the public sector or doing research on the Hispanic community (e.g., birth certificates, academic transcripts, medical reports, criminology documents, newspaper or magazine articles). Students gain practice in creating written documents in Spanish that would assist their communication with Latino clients in formal (professional) and informal contexts or that would allow them to report intelligently on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Written Communication) may not enroll in SPA 402 |
| SPA | 403 | Spanish Grammar and Stylistics for the Professions | Students raise their level of awareness of appropriate grammatical, lexical and stylistic forms to use in their oral and written communication with U.S. Latino clients in formal (professional) and informal contexts in the community (e.g., schools, government agencies, social work settings, medical settings) or for reporting on issues of interest to the Hispanic community. Students enhance their analytical skills by analyzing and comparing Spanish oral and written discourse for genre-appropriate features (stylistics), grammaticality, mechanics, coherence and for a logical flow of ideas in public documents and oral discourses meant for a U.S. Latino audience. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Span Gram & Stylistics for Pro) may not enroll in SPA 403 |
| SPA | 404 | Spanish in U. S. Professional Communities | Students investigate linguistic issues that impact the U.S. Latino community's interaction with professionals (e.g., interaction with service providers in schools, government agencies, social work settings, medical settings; language planning at state and local levels; Spanish spoken in different regions in the U.S.; Spanish language assessment of public sector employees; creation of Spanish for Professional Purposes courses). Students also learn to report on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish in the Community) may not enroll in SPA 404 |
| SPA | 405 | Latino Cultural Perspectives for the Professions | Requires students to investigate the Latino cultural perspectives that underlie and affect communication in the professional world. Students come to understand the historical context that has affected the lives of Latino community in the U.S. and take a critical look at values traditionally associated with Latino culture (e.g., the importance of family ties, fatalism, honor, respecting elders, machismo or marianismo), which provide background information for professionals in the public sector who need to serve the needs of the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Latino/a Cultural Perspect Pro) may not enroll in SPA 405 |
| SPA | 412 | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | 413 | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |
| SPA | 417 | Spanish Phonetics and Phonology | Introduces the theory and practice of Spanish phonetics and phonology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 or 413 with C or better |
| SPA | 418 | Spanish Syntax | Introduces the syntax of the Spanish language by analyzing different word categories, their groupings in phrases, and the structure of both simple and complex sentences. Advanced course that requires some previous knowledge of basic structures of the language and their internal structure. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 413 with C or better |
| SPA | 419 | Language Variations of Spanish | Spanish dialectology and variationist/quantitative sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre- or corequisite(s): SPA 417 and 418 with C or better if completed; Credit is allowed for only SPA 419 or SPA 494 (Language Variations of Spanish) |
| SPA | 420 | Applied Spanish Linguistics | Applies linguistic principles to the teaching of Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L | Pre-requisites: SLC 201 or SPA 400 with C or better; SPA 413 |
| SPA | 421 | Spanish in the Southwest | Discussion and linguistic analysis of Southwest Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or SB) & C | Pre-requisites: SPA 412 with C or better |
| SPA | 422 | Spanish Lexicology and Lexicography | Explores the linguistic theory and methodology related to the defining of meanings of words in Spanish dictionaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 |
| SPA | 425 | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 325 |

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| SPA | 426 | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 325 |
| SPA | 427 | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: SPA 325 |
| SPA | 428 | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & G | Pre-requisites: SPA 325 |
| SPA | 429 | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 431 | Prose of Golden Age | Focuses on a number of books of canonical prose of 16th- and 17th-century Spain. Spanish Golden Age prose is considered one of the most important bodies of literature both in the Spanish-speaking world and in early modern studies. An astonishing number of works of fiction and nonfiction were written in the period, inspiring artists and intellectuals all over Europe. All readings are representative of genres that, in addition to enjoying popularity in Spain, were extensively translated into other languages throughout Europe. Through a wide readership, <i>Carcel de Amor</i> , <i>el Lazarillo</i> , <i>La Celestina</i> , <i>El Abencerraje</i> , the <i>Novelas ejemplares</i> , and <i>Desenganos amorosos</i> , influenced the system of literary genres. They established a model for successful genres such as the sentimental novel, the picaresque and the Moorish novel, and promoted the reacceptance of the Italian novella in Spain. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): SPA 325 |
| SPA | 434 | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 435 | Cervantes-Don Quijote | Don Quijote and the development of the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: SPA 325 |
| SPA | 454 | 19th-Century Spanish American Narrative | Principal works in the novel, short story, narrative fiction, and narrative (Gauchesque) poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 456 | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 464 | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & C | Pre-requisites: SPA 325 |
| SPA | 471 | Civilization of the Spanish Southwest | Political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & C | Pre-requisites: SPA 314 or 316 |
| SPA | 472 | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | 473 | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |
| SPA | 474 | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 485 | Mexican American Short Story | Critical study of contemporary short stories by Mexican American authors, with emphasis on their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & C | Pre-requisites: SPA 325 |
| SPA | 486 | Mexican American Novel | Social and literary contexts of representative novelists, emphasizing their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 487 | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 534 | Spanish Drama of the Golden Age | Analyzes principal works and figures of Golden Age Drama (Cervantes, Lope de Vega, Calderón, Tirso de Molina, Moreto, Ruiz de Alarcón) with current theater theory and comedia performance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 536 | Generation of 1898 | Works of Unamuno, Baroja, Azorín, and their contemporaries, studied against the ideological background of the turn of century in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 537 | Women in Spanish Literature | Major female writers and their texts from Spanish literature (María de Zayas, Ángela Grassi, Concepción Arenal, Emilia Pardo Bazán, Carmen Laforet, Paloma Pedrero) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 538 | Mexican American Women Writers | Major female figures and works in Spanish or translation by contemporary writers (Zamora, Castillo, Corpi, Anzaldúa, L.D. Cervantes, D. Chávez, Duarte, Cisneros) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 539 | General Spanish Linguistics | Introductory course to the study of the linguistic structure of the Spanish language and its various sub fields, such as phonetics, phonology, syntax, morphology and the history of the language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: graduate student; students who have credit for SPA 400, may not enroll in SPA 539 |
| SPA | 540 | History of the Spanish Language | Analyzes and discusses the development of Spanish from Vulgar Latin to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 541 | Spanish Language in America | Discusses and analyzes various regional and social varieties of Spanish in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 542 | Studies in the Spanish of the Southwest | Examines bilingualism and the social and regional dialects of Spanish in the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 543 | Structure of Spanish | Analyzes and discusses data on selected topics in Spanish morphology, semantics, and syntax. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 544 | Spanish Phonology | Surveys problems of Spanish phonology within the context of recent phonological theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 545 | Concepts of Literary Criticism | Aims and methods of modern literary scholarship. Discusses major theories of literary analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 547 | Spanish Pragmatics | Studies the theoretical aspects of pragmatics and their incorporation to the analysis of talk in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 400 or SPA 539 |
| SPA | 552 | Studies in Mexican American Film | Major figures and films by contemporary filmmakers (Sylvia Morales, Cheech Marin, Gregory Nava, Lourdes Portillo, Roberto Rodríguez, Evelina Fernández) interpreted via critical film theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 555 | Spanish American Modernism | Principal works and figures of literary modernism, 1880-1920, with emphasis on international literary context of the movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 557 | Contemporary Spanish American Poetry | Major works and problems in contemporary poetry and poetics, with emphasis on Paz, Parra, Cardenal, and new poetry since 1960. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 560 | Medieval Spanish Literature | Major figures and works of the Middle Ages in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 561 | Golden Age Spanish Prose Fiction | Major figures and works of the 16th and 17th centuries, with emphasis on the picaresque novel. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 562 | Golden Age Spanish Poetry | Major figures and works of the 16th and 17th centuries, with emphasis on lyric poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 563 | Spanish Romanticism | Principal figures and works of Spanish romanticism, with emphasis on international literary context of the movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 564 | 19th-Century Spanish Prose Fiction | Principal figures and works of realism in the 19th-century novel, with emphasis on Galdós and others. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 565 | 20th-Century Spanish Drama | Principal figures and works of Spanish dramatic literature from the Generation of 1898 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 566 | Generation of 1927 | Major poets of the Generation of 1927, with emphasis on works of Lorca, Guillen, Salinas, and Aleixandre. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 567 | Contemporary Spanish Novel | Major works of post-Civil War Spanish fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 568 | Cervantes | Extensive analysis of the prose and theater of Cervantes as a key figure of the Spanish Golden Age. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 569 | Studies in Spanish Film | Examines major figures and films in Spanish cinema. Critically interprets films through current film theory, history, and critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 570 | Indigenous Literatures of Spanish America | Indigenous literary traditions, with emphasis on Nahuatl, Mayan, and Quechua literatures through readings in Spanish translations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 571 | Colonial Spanish American Literature | Major figures and works from conquest to independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 572 | Spanish American Drama | Major contributions of Spanish American drama, with emphasis on contemporary dramatists. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

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| SPA | 573 | Spanish American Essay | Major works of the essay, within the framework of intellectual history and literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 574 | Spanish American Vanguard Poetry | Examines poetic developments, 1920-1940, with emphasis on Huidobro, Vallejo, Neruda, and the international context of their works. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 575 | Contemporary Spanish American Novel | Principal novels of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 576 | Contemporary Spanish American Short Story | Principal short stories of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 577 | Regional Spanish American Literature | Figures and works of major national (Peru, Argentina, Chile, and Mexico) and regional (Caribbean) literatures. Topics offered on a rotating basis. May be repeated when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 578 | Novel of the Mexican Revolution | Representative works and authors of this genre (Guzmán, Azuela, Urquiza, Muñiz, and Romero), including related or peripheral offshoots in indigenous novels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 581 | Latin American Popular Culture | Studies in selected topics of Latin American popular culture, with emphasis on appropriate academic models for the critical analysis of these materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 582 | Studies in Latin American Film | Examines the role of film in contemporary Latin American culture; films viewed and analyzed as casebook examples. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 585 | Mexican American Short Story | Major collections and figures in Spanish or translation by contemporary Chicano short story writers (Ullica, Suárez, Ulibarri, Soto, Aguilar, P. Martín, Alarcón, R. Sánchez, N. Cantú, J. Sagel, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 586 | Mexican American Novel | Major novels and figures in Spanish or translation by contemporary Chicano novelists (Hinojosa-S., Méndez, Morales, Cota-Cárdenas, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 587 | Mexican American Drama | Major works of Mexican American drama, with emphasis on contemporary playwrights (Valdez, Portillo-T., Morton, Moraga, Gómez-Peña) interpreted via current critical drama theory or other methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 588 | Mexican American Essay | Major figures and essays in Spanish or translation by contemporary essayists (Rendón, Anzaldúa, Villanueva, Rodríguez, Mora, Stavans) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 589 | Mexican American Poetry | Major figures and works in Spanish or translation by contemporary poets (Gonzales, Alurista, L.D. Cervantes, B. Zamora, R. Sánchez, Baca, G. Valdés, J. Montoya, G. Velázquez, T. Villanueva, J.F. Herrera, A. Villanueva) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

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| SPA | 601 | Latin American Feminist Cultural Production | Latin American feminist theory and studies as viewed through cultural production such as literature, film, photography, art. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 791 | Seminar | | Y | LEC | Y | CNV | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPA | | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |

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| SPA | | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |
| SPA | | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 325 |
| SPA | | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 325 |
| SPA | | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: SPA 325 |
| SPA | | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L & G | Pre-requisites: SPA 325 |
| SPA | | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C | Pre-requisites: SPA 325 |
| SPA | | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |
| SPA | | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| SPA | | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| SPA | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SPA | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 222 | Orientation to Education of Exceptional Children | Includes gifted, mildly handicapped, severely handicapped, and the bilingual/multicultural exceptional child. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB & C | |
| SPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 310 | Professional Practices and Foundations in Special Education | Foundational themes and issues in special education. Discusses each disability within the mild cross-categorical area in relation to foundational themes and issues relating to professional practices in special education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 312 | Mental Retardation | Characteristics and assessment specific to mental retardation. Emphasizes terminology, development, educational programming, and therapeutic procedures. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 314 | Introduction to Bilingual/Multicultural Special Education | Theoretical background and practical application of general issues regarding the education of bilingual/multicultural handicapped children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 316 | Introduction to Physical Disabilities and Other Health Impairments | Introduces various physical disabilities and other health impairments with an emphasis on service delivery in schools and communities. | N | LEC | N | OPT | Institute & Grad Sch Education | Division of Curriculum and Instruction | 3 | | |
| SPE | 317 | Special Education for Culturally and Linguistically Diverse Children and Youth | General issues and practical applications regarding the education of culturally and linguistically diverse students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| SPE | 318 | Family-School Collaboration | Explores relationships between families of children with special needs and professionals in educational institutions and community agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 320 | Assessment and Evaluation of Children with Special Needs | Norm-referenced, criterion-referenced, and formative evaluation to determine eligibility, plan individualized programs, and monitor progress of students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 321 | Classroom and SPE Assessment | Norm-referenced and criterion-referenced assessment and evaluation of student learning to determine eligibility. Plan individualized programs, and monitor progress of students with disabilities while emphasizing integration and adaptation of curriculum, instruction and evaluation of all students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| SPE | 322 | Behavior Management and Consultation | Analysis, intervention, and consultation strategies for effective management of classroom and social behavior for students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 323 | Behavioral Strategies for All Students | Develops and implements intervention and consultation strategies for effective management of classroom behavior for all students, including those with learning differences in general education and special education settings. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| SPE | 325 | Language Literacy 1 in Elementary Schools | Instructional strategies for teaching reading using systematic research-based phonics to aid decoding, vocabulary; and comprehension development; writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |
| SPE | 336 | Behavioral and Emotional Problems in Children | Characteristics and assessment specific to emotionally and behaviorally disturbed children. Emphasizes terminology, development, and educational programming. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 361 | Introduction to Learning Disabilities | Characteristics and assessment specific to learning disabilities. Emphasizes terminology, development, and educational programming. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 396 | Clinical Experience I | Applies course content while working with students with disabilities in inclusive settings. Emphasizes classroom and behavior management. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| SPE | 397 | Field Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | Y | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 |
| SPE | 410 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| SPE | 411 | Parent Involvement and Regulatory Issues | Emphasizes parent and school relations through effective communication and state and federal regulations impacting services for the handicapped. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 412 | Evaluating Exceptional Children | Normative and criterion-referenced diagnostic techniques, including formative evaluation. Emphasizes application. Requires daily practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 413 | Methods in Language, Reading, and Mathematics for Exceptional Children | Methods, techniques, and materials for use in prescriptive teaching. Requires daily practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 414 | Instructional Management and Strategies: Reading and Writing | Organization and delivery of instruction, including formative evaluation techniques. Instructional techniques of reading and writing. Requires regular participation in a field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 415 | Classroom and Behavior Management | Analysis and intervention into social behavior problems of exceptional populations. Requires regular participation in a field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 416 | Quality Practices in the Collaborative Classroom | Develops skills, strategies, and a knowledge base for preservice teachers in building collaborative partnerships with special educators. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 417 | Inclusion Practices at the Secondary Level | Applies curricular practice and how preservice teachers work with students with special needs in middle and secondary levels. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 419 | Instruction in Content Areas: Science and Social Studies | Develops and implements instructional methods and learning strategies for students with special needs related to science and social studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 422 | Methods and Technology for High-Incidence Disabilities | Assessment and instructional methods for students with high-incidence disabilities including mild intellectual disabilities, learning disabilities, emotional disabilities, and physical/health impairments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Senior standing |
| SPE | 423 | Methods of Cross-Categorical Special Education 1 | Teaches proficiency in developing lesson plans, monitoring student progress and developing strategies that focus on phonics and phonemic awareness for students with special needs. Students understand how to use data from all stakeholders to create an IEP that includes a PLAAFP, goals, and how to make instructional decisions using assessment data. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 424 | Methods of Cross-Categorical Special Education 2 | Examines and implements methodologies and instructional strategies in transition, mathematics, reading and other content area for students who have low-incidence intellectual disabilities, emotional/behavioral disorders, specific learning disabilities, orthopedic impairments (OI), and other health impairments (OHI). Includes assistive and instructional technologies suitable for cross-categorical settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 430 | Professional Practices, Foundations, & Collaborative Teaching in Special Education | Methods and issues in cooperative teaching for students with disabilities in the general education classrooms. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 431 | Collaborative Teaching Methods for General Education Classroom Environments | Methods and issues in cooperative teaching for special education students in general education classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 478 | Student Teaching in Special Education | Student teaching in special education classrooms. Synthesized experience in curriculum, instruction, and classroom management. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 8 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 495 | Student Teaching in Early Childhood Special Education | Supervised teaching in the early childhood special education classroom setting. Synthesizes experience in curriculum, instruction, classroom organization, and guidance of young children. | N | PRA | N | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Pre-requisite: Senior standing |
| SPE | 496 | Field Experience III | Applies course content in a special education setting. Emphasizes observation pupil management, planning and delivering instruction, and assessment. | N | PRA | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| SPE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| SPE | 511 | The Exceptional Child | Educational needs of exceptional children and adults. Not recommended for students who have completed SPE 311. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 512 | Individuals with Intellectual Disability | Etiology, diagnosis and management of individuals with intellectual disability. Current trends in prevention, programming and teacher preparation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only SPE 312 or SPE 512 |
| SPE | 514 | Bilingual/Multicultural Aspects of Special Education | Theories and issues related to the education of bilingual and culturally diverse exceptional children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 519 | Inclusion Methods: Science, Social Studies, and Mathematics | Instructional strategies used for delivery of science, social studies, and mathematics with exceptional children and youth. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 520 | Reading and Communication Strategies for Individuals with Autism | Understands and applies reading and communication strategies with individuals with autism and related disorders. Includes historical, diagnostic, and identification issues. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 521 | Foundations of Autism Spectrum Disorders | Increases the understanding of characteristics of individuals with autism. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 524 | Effective Classroom Behavior Management | Organization and delivery of instruction including formative evaluation and techniques of academic behavior management for exceptional children. Requires practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 525 | Social Behavior Interventions | Analysis and intervention into social behavior problems of exceptional students. Focuses on strategies to change maladaptive social behavior. Requires practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 531 | Methods of Applied Behavior Analysis for Exceptional Populations | Methods based on the principles and concepts of applied behavior analysis. Students learn to operationally define problem behavior, conduct functional behavior assessment and generate recommendations for the development of behavior analytic interventions. Students gain knowledge and understanding of specific scientifically valid behavior change procedures. Discusses and applies their corresponding literature base. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 532 | Systems, Policies, and Program Practices | Analyzes historical, political, social, and legal factors impacting special education services. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 533 | Issues and Foundations in Special Education | Foundational themes and issues in special education. Critical issues related to characteristics of students with mild emotional disturbance, behavior disorders, learning disabilities, mental retardation, orthopedic, and other health impairments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 534 | Assessment and Evaluation for Children with Special Needs | Discusses assessment practices related to student eligibility and program planning. Emphasizes authentic, individualized, interdisciplinary practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 535 | Curricula, Methods, Technology, and Adaptations in Special Education | Develops strategies for effective adaptation of special education and general education curriculum through use of technology. Includes methods for addressing special needs in reading, math and language disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 536 | Characteristics of Children with Behavioral Disorders | Variables contributing to behavior patterns of behaviorally disordered children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 537 | Instructional Management: Reading and Language Arts | Instructional strategies used for delivery of reading and language arts with exceptional children and youth. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 538 | Language and Literacy I | Instructional strategies for teaching reading using systematic, research-based phonics to aid decoding, vocabulary, comprehension development, writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College MEd or doctoral student. Credit is allowed for only RDG 531 or SPE 538 |
| SPE | 540 | Family-Centered Practices | Provides definitions, models, activities and exploration in the various roles in collaboration, consultation and teamwork in the field of special education. In-depth exploration of connections with families, professionals and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 541 | Consultation Frameworks and Issues | Models, activities, and roles of educational consultants working with families, professionals, and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 542 | Systems, Policies, and Program Practices for Infants and Young Children | Analyzes historical, political, social, and legal factors affecting services for infants and young children. Examines critical issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 543 | Issues in the Development of Infants and Young Children | Factors and conditions that affect early development. Strategies for promoting attachment, self-regulation, resilience, adaptation, and coping. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 544 | Assessment and Evaluation of Infants and Young Children | Developmental assessment and related program planning for infants and young children. Emphasizes authentic, individualized, family-centered and culturally competent approaches. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 545 | Curricula, Methods, Technology, and Adaptations for Infants and Young Children | Developmentally appropriate practices. Serving young children with diverse abilities in natural, inclusive settings. Emphasizes cognitive development, social competence. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPE | 546 | Communication, Language, and Early Literacy | Early communication development and language acquisition. Facilitating communicative competence and early literacy for infants and young children with diverse abilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 547 | Supporting Motor Development | Early sensorimotor development. Strategies to facilitate the acquisition of motor skills and address the needs of children with motor disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 548 | Cross-Categorical Foundations: LD, ED, MR, & PI/OHI | Foundations course compares cognitive, motor, and affective developmental and educational issues across LD, ED, MR, and PI/OHI. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 550 | Inclusion Practices in Science and Mathematics | Facilitates and expands knowledge in the practical application of strategies meeting diverse needs of learners in science and mathematics classrooms | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 551 | Teaching Young Children with Special Needs | Methods, materials, and curriculum for preschool and primary-aged children with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 553 | Developmental/Functional Assessment | Teacher-focused developmental/functional assessment of preschool and severely, physically, and multiply handicapped individuals. Requires field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 554 | Learning as a Collaborative Practice | Includes knowledge and procedures for involvement and training of parents and caregivers of preschool and severely handicapped individuals. Requires field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 555 | Inclusive Practices for Diverse Learners | Adapting instruction and assessment to meet the needs of all learners in inclusive settings. Includes the creation of plans to address challenging classroom behaviors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 559 | Methods for Teaching Diverse Learners | Apprentice teachers select a specific population, based on placement (mild to moderate or moderate to severe), for individualized investigation. Utilizes practical strategies for curriculum development and IEP implementation. Gains a deeper understanding of their practice by analyzing and reflecting for the purposes of monitoring and adjusting instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: MEd Special Education (Teacher Certification) major |
| SPE | 561 | Characteristics/Diagnosis of Learning Disabilities | Theories related to learning disabilities, including identification and characteristics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 565 | Behavior Change Systems | Focuses on applied behavior analysis-based behavior change systems and procedures. Students learn to identify, implement, manage and supervise interventions based on fundamental elements of behavior change. Addresses behavior change considerations, including ethical use of behavior change systems and ongoing data collection for fidelity and progress monitoring. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate |
| SPE | 566 | Applied Behavior Analysis in Inclusive Settings | Examines definitions, characteristics, assumptions and basic principles of applied behavior analysis. Describes and applies fundamental elements of behavior change, including reinforcement schedules, modeling, shaping, chaining and other behavior change procedures. Activities center on the design and delivery of social skill interventions with individuals with special needs in inclusive settings. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 567 | Ethics of Applied Behavior Analysis | Addresses knowledge and application of the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts. Examines and resolves ethical dilemmas which may be encountered by behavior analysts. Addresses roles and responsibilities of members of a multidisciplinary treatment team comprised of educators, behavior analysts, parents, learners and other professionals. Students conduct risk-benefit analysis of evidence-based treatment approaches and develop declarations of professional practices and procedures for behavior analysts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 568 | Behavior Assessment | Focuses on critical aspects of applied behavior analysis, experimental design and the identification and implementation of effective assessment methodologies. Addresses client-centered responsibilities of the behavior analyst including problem identification, measurement, assessment, data collection and analysis. Students gain experience conducting functional behavior assessment and stimulus preference assessment to inform intervention design. Emphasizes measuring and ensuring treatment integrity. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate. Credit is allowed for only SPE 568 or SPE 598 (Behavioral Assessment) |
| SPE | 569 | Research Methods in Applied Behavior Analysis | Students gain expertise and practical experience in the interpretation and application of experimental design to inform decision making. Focuses on evaluation of the effectiveness of interventions through use of behavior analytic technologies in clinical and applied settings. Students learn to interpret and describe behavior in behavior analytic terms and explain concepts and approaches in everyday language. Students research and evaluate skill assessment approaches through strategic review of the behavior analytic literature. Course addresses single-subject methodologies to inform design and delivery of effective instruction and clinical interventions. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); SPE 531; SPE 566; Credit is allowed for only SPE 569 or SPE 598 (Research Methods Applied Behavioral Analysis) |
| SPE | 572 | Testing and Measurement in Gifted Education: Methods | Covers current and historical aspects of testing and measurement in the field of gifted education. Topics include: the history and purposes of IQ testing, definitions of various types of tests, purposes of testing for gifted education services, ability tests and achievement measures, how tests are used in Arizona in programs for gifted learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SPE 572 or 591 (Testing&Measurement Gifted Ed) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPE | 573 | Differentiating Instruction for Gifted Learners: Teaching Methods | Explores the design of differentiated curriculum and instruction for gifted learners in elementary and secondary education | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only SPE 573 or 591 (Diff Curriculum Gifted Child) |
| SPE | 575 | Survey, Issues, and Foundations for the Exceptional Student | Explores the foundations of special education through characteristics and eligibility of exceptional students. Analyzes historical, political, social, and legal factors impacting special education services for exceptional students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 576 | Clinical Experience | Applies course content in special education classrooms: observation, pupil management, planning and delivery of instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Valid copy of AZ DPS fingerprint card on file at ASU; MED in Special Education major |
| SPE | 577 | Inclusive Teaching and Learning | Develops successful learning environments for students using evidence-based instructional approaches, collaborative teaching models, and culturally responsive practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 578 | Student Teaching in Special Education | Y grade only. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 579 | Apprentice Teaching in Special Education | Apprentice teaching in special education setting. Must be taken four times for a total of 12 semester hours. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 582 | Research and Evaluation in Special Education | Introduces interpreting research. Specific research techniques with primary emphasis on classroom research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 585 | Creativity: Foundations of Research and Development in Gifted Education | Explores nature of creativity in terms of philosophical underpinnings, empirical evidence, human development, self-actualization, and the ecology surrounding the creative event. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 586 | Advising the Gifted Learner: Social and Emotional Needs | Focuses on educational planning and guidance, social and emotional development, and family problem solving regarding needs of gifted children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 587 | Special Populations in Gifted Education | In-depth analysis of major controversies in educating the gifted, including nature/nurture, the role of mental tests, and sex differences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 588 | The Gifted Learner: Foundations of Identification, Education and Development | Gifted children's characteristics, identification, needs, school and home environments, definitions, and misunderstandings. Research by Pressey, Stanley, Terman, and others. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 589 | Teaching the Gifted Learner: Models, Methods, and Programs | Methods in teaching elementary and secondary school gifted children, including individualized and computer-assisted instruction, team teaching. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 597 | Capstone | Applies theoretical and practical information presented through coursework in a real-world setting. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 702 | Conducting Research with Special Populations | Considers concepts and methodologies for conducting research with any aspect of special education, including gifted and multicultural. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Doctoral student |
| SPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Special Education Doctoral student |
| SPF | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 301 | Culture and Schooling | For the professional teacher preparation program. Overview of the cultural, social, and political milieus in which formal schooling takes place in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SPF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 401 | Teachers and the Law | For the professional teacher preparation program. Analysis and interpretation of classroom behavior from perspectives derived from philosophy, social science, and law. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | |
| SPF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SPF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| SPF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 501 | Culture and Schooling | Introduces social science concepts of culture and the cultural milieu in which schooling takes place in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 511 | School and Society | Interrelationship of school and society and the role of education in social change. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 515 | Gender and Education | Methods and materials for remediating the basic academic problems of exceptional children. Prerequisite: admission to MED in Special Education program. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 530 | Sociology of Education | Current issues in the sociology of education: stratification, social mobility. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 544 | Philosophical Foundations of Education | Theories of education in ancient, medieval, and modern classical and contemporary philosophies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 597 | Teacher and the Law | For the professional teacher preparation program. Analysis and interpretation of classroom behavior from perspectives derived from philosophy, social science and the law. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 603 | Visual Ethnography in Education | Advanced qualitative methods class combining ethnography with the use of video and still photography in data gathering and presentation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 612 | Evaluation Theory | Explores the major theories of evaluation (inquiry leading to value judgments) in educational policy through examination of cases. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 622 | Organizational Theory | Major views of organizations and their influence on role definition and participant behaviors in educational organization. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 634 | Foundations of Educational Inquiry | Overview of the nature of inquiry examining the philosophy of science and social science, approaches to knowing in the humanities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (Degree or non-degree) student; Credit is allowed for only SPF 534 or 634 |
| SPF | 677 | Foundations of Educational Reform Movements | Historical and contemporary survey of curricular reform movements in the United States with emphasis on equity and social justice issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPF | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 685 | Education in Global Contexts | Global perspectives on education in contemporary society with emphasis on social, political and economic factors that affect access and equity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-6 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SSH | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease, ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB or SSH 100 |
| SSH | 194 | Covers topics of immediate or special interest to a faculty member and students. | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201, SSH 201 or 294 (Introduction to Epidemiology) |
| SSH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisite: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| SSH | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, to urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301. |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SSH | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |
| SSH | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Credit is allowed for only ASB or SSH 355 |
| SSH | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SSH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 400 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| SSH | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |
| SSH | 402 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only ASB 452 or SSH 402 |
| SSH | 403 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisites: SSH 100 or ASB 100; Credit is allowed for only ASB 443 or SSH 403 |
| SSH | 404 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |
| SSH | 405 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| SSH | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SSH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| SSH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SSH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| SSH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| SSH | 502 | Professional Seminar in Global Health | Focuses on skills, ideas, and practice related to the Global Health MA and PhD at Arizona State University. Seminar. Prerequisite: Must be a graduate student in the Global Health degree program. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Pre-requisite: Must be a graduate student in the Global Health degree program |
| SSH | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 511 | Ethics in Health Social Science Research | Ethics and social justice issues in community-based health research relevant to health social science, including informed consent, community involvement, control, advocacy. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: SSH 510 or ASB 510 |
| SSH | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Pre-requisites: ASB 511 or SSH 511; Graduate (degree or nondegree) student |
| SSH | 513 | Research Design and Proposal Writing in Health Social Science | Research design, piloting, and proposal writing for social scientists conducting health research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 500, SSH 511 or ASB 511 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------|
| SSH | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| SSH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| SST | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | |
| SST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours. Credit is allowed for only AFR, APA, JUS or SST 428 |
| SST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| SST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 501 | Foundations of Social Transformation | Introduces the foundations of social transformation and social change. Looks at social transformation through an interdisciplinary lens and explores the connections between the objective and subjective factors that enable or inhibit social transformation in different contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SST | 510 | Social and Cultural Pedagogy: Theoretical and Practical Issues | Engages students with the academic literature and scholarly debates on social and cultural pedagogy, reviews practical lessons from the field, and provides an overview of different areas of intervention and professional practice. Considers the historical, local, and international dimensions of social and cultural pedagogy, illustrating them with selected case studies. Encourages the study of social and cultural pedagogy using a critical and interdisciplinary perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| SST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| SST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| STM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|------------------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-4 | | |
| STM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Prerequisite: Freshman status; Maximum 25 earned hours |
| STP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 220 | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 231 | Statistics for Life Science | Concepts and methods of statistics; display and summary of data, interval estimation, hypothesis testing, correlation, regression. Applications to biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 117 or 142 with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 280 | Probability and Statistics for Researchers | Methods for data summary, numerical summary measures, probability concepts, discrete and continuous probability distributions, expected values, statistics, sampling distributions, point estimation, and introduction to statistical inference for a single parameter. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 251, 265, or 270 |
| STP | 281 | Statistical Analysis for Researchers | Confidence intervals, hypothesis testing, one- and two-factor analysis of variance, simple linear regression, multiple regression, chi-square tests, and introduction to statistical quality control. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 280 |
| STP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 300 | Introduction to Probability | Probability models and computations, joint and conditional distributions, moments, families of distribution, stochastic processes, simulation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: Must have completed MAT210 with a grade of C or greater or be currently enrolled. |
| STP | 310 | Design and Analysis of Experiments | Factorial and nested designs, randomized designs, randomized complete block designs, Latin squares, fixed and random effects, expected mean squares, multiple comparisons, and analysis of covariance. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MAT 266 (or MAT 271); STP 281 |
| STP | 311 | Regression and Time Series Analyses | Simple linear regression, multiple linear regression, indicator variables, influence diagnostics, stepwise selection, logistic regression, introduction to time series models, autocorrelation, and some ARIMA models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 281 |
| STP | 315 | Statistical Computing | Statistical techniques using a professional statistical programming language (e.g., SAS, R). Emphasizes correct methods, writing and presentation of results | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 281; STP 310 (or STP 311) |
| STP | 326 | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ACT 415 or STP 326 |
| STP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 421 | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | 425 | Stochastic Processes | Markov chains, stationary distributions, pure jump processes, 2-D order processes, and other topics in stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 342 (or 343); STP 421 with C or better. |
| STP | 427 | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | 429 | Experimental Statistics | Statistical inference for controlled experimentation. Multiple regression, correlation, analysis of variance, multiple comparisons, and nonparametric procedures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: STP 420 with C or better |
| STP | 450 | Nonparametric Statistics | Rank- and order-based tests and estimation procedures for 1 sample and 2 or more related or independent samples, measures of correlation, and introduction to resampling methods, including bootstrap and randomization tests. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 310 |
| STP | 451 | Quality Improvement | In-depth concentration on statistical process control for attribute and variables data, process capability analysis and measurement systems analysis. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 281; STP 310; MAT 272 |
| STP | 452 | Multivariate Statistics | Statistical analysis of multivariate data including methods for preparation and presentation of multivariate data, MANOVA, discriminant analysis, principal component analysis, factor analysis, cluster analysis, random forests and classification trees. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 311; MAT 343 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| STP | 460 | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | 485 | Statistics Capstone | Students work in a team and partner with a client to solve a real-world problem requiring statistical analyses. Emphasizes problem development, integration of technical skills, teamwork and communication among the students and with the client. Requires regular meetings and presentations with team, client and faculty advisor. | N | LEL | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: Senior standing; STP 310, 311, 6 additional hours of upper-division STP excluding STP 492, 493, 498, 499 |
| STP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 495 | Undergraduate Research | Supervised research in statistical or probability studies. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or STP 495 |
| STP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| STP | 501 | Theory of Statistics I: Distribution Theory 3 | Introduces rigorous probability theory, including distributions and expectations of random variables, transformations of random variables and order statistics, generating functions and basic limit concepts. Supplements the understanding of applied statistics with a firm grasp of the probabilistic underpinnings of theoretical statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking); Credit is allowed for only STP 501 or STP 598, Theory of Statistics I |
| STP | 502 | Theory of Statistics II: Inference | Presents techniques and basic results of mathematical statistics at a rigorous level. Develops the structure of statistical inference procedures, including the principles of data reduction, theory of estimation, confidence sets, hypothesis testing, and prediction for common parametric models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 501 with B- or better; Credit is allowed for only STP 502 or STP 598, Theory of Statistics II |
| STP | 525 | Advanced Probability | Measure-theoretic foundations of probability, distribution functions and characteristic functions, laws of large numbers and central limit theorems, conditional probabilities, martingales, and topics in stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 526 | Theory of Statistical Linear Models | Multinomial distribution, distribution of quadratic forms, full and nonfull rank models, generalized inverses, unbalanced data, variance components, and the large sample theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 527 | Statistical Large Sample Theory | Types of convergence, central limit theorems, theory of maximum likelihood estimation, efficiency, robustness, influence functions, theory of bootstrap methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 530 | Applied Regression Analysis | Method of least squares, simple and multiple linear regression, polynomial regression, analysis of residuals, dummy variables, and model building. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 531 | Applied Analysis of Variance | Factorial designs, balanced and unbalanced data, fixed and random effects, randomized blocks, Latin squares, analysis of covariance, and multiple comparisons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 532 | Applied Nonparametric Statistics | One-sample test, tests of 2 or more related or independent samples, measures of correlation, and tests of trend and dependence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 533 | Applied Multivariate Analysis | Discriminant analysis, principal components, factor analysis, cluster analysis, and canonical correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 534 | Applied Discrete Data Analysis | Models for discrete and count data, measures of association, and log-linear and regression models for contingency tables. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 535 | Applied Sampling Methodology | Simple random, stratified, cluster sampling; variance estimation in complex surveys; nonparametric superpopulation approaches; nonresponse models; computational methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 581 | Statistical Consulting Clinic | Provides practical experience in the application of statistical theory and methods to problems from a wide variety of disciplines, exposing students to a diverse range of data types and clients. Develops nontechnical consulting skills, for example explaining statistical concepts to non-statisticians, writing reports, and making oral presentations. | N | PRA | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: STP 530, 531; Credit is allowed for only STP 581 or 598 (Statistical Consulting) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| STP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| STP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| STP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| STP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| STP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| STP | | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better, Credit is allowed for only ACT 415 or STP 326 |
| STP | | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| STP | | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| STP | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| STP | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| STP | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STS | 101 | Introduction to Science, Technology, and Society | Overview of the basic issues, definitions, and literature involved in the study of science, technology, and human systems. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 110 | Global Technology and Development | Introduces awareness and understanding of how technology, processes of globalization, and society influence one another. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 202 | Science, Technology, and Diversity | Examines the concept and meaning of the "technology gap" and its implications of the global impact of scientific and technological advances. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 235 | Technology and Urban Systems | Focuses on the relationship between technology and urbanization, especially on how technological innovation and change impact all aspects of urban systems, including urban social and economic development, sustainability, governance, environmental, and community change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 250 | Science, Society, and Global Warming | Addresses global warming and its implications for society, including evidence and components of warming, measurement of warming and global change, and the social and political aspects of change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Students who have credit for STS 294 (Society and Global Warming) may not enroll in STS 250 |
| STS | 260 | Politics of Science and Technology | Explores the relationship among government, politics, science, and technology, especially the interdependence of public policy and science and technological pursuits. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 301 | Research in Science and Technology Studies | Examines methods of inquiry in the social sciences with emphasis on STS, including both qualitative and quantitative approaches, philosophy of science, and scientific revolutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 302 | Philosophy of Science and Technology | Focuses on the nature and implications of science as a body of knowledge, set of practices, specific methods, and how these differ from other human enterprises and activities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| STS | 303 | History of Science and Technology | Examines the history of technology within social, cultural, political, and economic contexts and the critical relationship between society and technology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | H | Prerequisite(s): minimum 45 hours |
| STS | 304 | Science, Technology, and Society | Overview of the major issues associated with the study of science, technology, and human systems, including theoretical approaches. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| STS | 305 | Science and Social Theory | Explores the different theoretical traditions that inform social interpretations of science, including awareness of the historical traditions that define these interpretations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 306 | Social Effects of Science and Technology | Examines the effects of science and technology on social life and the contexts in which those effects manifest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 317 | Science, Technology, and Global Engagement | Overview of international issues associated with both the development and deployment of technologies, including matters concerning international relations. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 318 | Science, Technology, and Government | Examines the foundations of the interrelationship of science, technology, and democratic governance, with emphasis on the American political system. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 325 | Science, Technology, and Public Policy | Examines the interaction of science and technology with American domestic policy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 327 | Science and Applied Ethics | Complex issues occurring on the interface of science, society, and values, with a focus on the dilemma of animal subjects in research. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 328 | Science, Technology, and Culture | Overview of technology and international cultures, including cultural definitions of science and technology. May intersect issues of culture and religion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 329 | Cultivating Technology in Newly Industrializing Countries | Covers specific issues relating to building technological capability in newly industrializing countries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 330 | Information Technology and Globalization | Examines the intersection of advances in information technology and globalization and the impact of these processes on human systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 331 | Ethical Issues in Science and Technology | Examines the interconnections between values and science and technology by examining such topics as computers and privacy, medical malpractice, reproductive technologies, patents, and hazardous facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 332 | Global Issues in Science and Technology | Examines contemporary international debates in science and technology and how those issues impact globalization. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 364 | Science, Technology, and National Security | Examines how changing technologies impact all aspects of national security policy in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| STS | 380 | Science, Technology, and Values | Interdisciplinary evaluation of the mutual interaction of science, technology, and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 382 | Ethics in Engineering and Technology | Role of engineering and technology in society; focuses on ethical issues confronting engineering and technology professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 401 | Statistics in Science and Technology Studies | Introduces statistical techniques for the social sciences, including the role and rationale of statistics, descriptive measures, associational measures, and inferential statistics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: MA general studies requirement satisfied |
| STS | 425 | Law, Values, Science, and Technology | Examines the interconnections of law, values, and science and technology with a view to establishing their reciprocal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| STS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| STS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SWG | 501 | Micro Human Behavior in the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre/Co-requisite: masters or doctoral in Social Work major |
| SWG | 502 | Human Behavior in the Social Environment II | Life span development from middle childhood to maturity. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite: MSW or DSW student |
| SWG | 503 | Development of Families in Oppressive Context | Addresses the development of healthy families and children. Explores essential tasks of human development and theories that inform practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student |
| SWG | 504 | Theories of Human Behavior | Addresses development of healthy adults and human behavior in groups, organizations, and communities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters of Social Work student; SWG 503 with a C or better or currently enrolled |
| SWG | 510 | Foundation Practice I | Basic social work methods with emphasis on the problem-solving process as it pertains to individuals, families, and small groups. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Must be Master or Doctor Social Work student. |
| SWG | 511 | Foundation Practice II | Theory and methods of direct practice with groups and selected practice models. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 510 with C or better |

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| SWG | 512 | Values and Ethics of Social Work Practice I | Develops a basic understanding of diverse ethical systems and their application to a broad range of human problems in various social and cultural contexts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student |
| SWG | 513 | Social Work Generalist Practice II | Building on SWG 512, continues to develop and apply a generalist framework of social work practice. Examines theories of practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student; SWG 512 with C or better |
| SWG | 514 | Bridge Seminar I | Professional social work practice at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 516 |
| SWG | 515 | Bridge Seminar II | Generalist practice problem-solving skills with diverse individuals, groups, families and systems at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Adm and Community Practice) major. Corequisite(s): SWG 516. Pre- or corequisite(s): SWG 514. Credit is allowed for only SWG 515 or SWG 598 (Bridge Seminar II) |
| SWG | 516 | Social Work Skills Seminar | Focuses on the acquisition of practice skills for advanced interaction with individuals, families, groups and communities. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 514, 515 |
| SWG | 519 | Research Methods in Social Work | Conceptual foundations and methods of nomothetic research in social work. Includes problem identification, hypothesis formulation, measurement, sampling, and experimental design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 520 | Research and Advocacy | Develops knowledge and skills needed to utilize and engage in social research related to advocacy issues and the evaluation of social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters of Social Work student |
| SWG | 526 | Mental Health for Sentencing | Helps justice system professionals understand existing mental health diagnoses, the DSM-5, and how specific DSM-5 categories are associated with specific types of crime. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 527 | Mitigation of Death and Life Cases | Issues and skills for practicing as a mitigation specialist in cases of death and life without parole. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 528 | Presentence Investigations | Examines the functions and objectives of presentence investigation reports and prepares students to perform different types of investigations for limited and general jurisdiction courts for local, state and federal courts. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 529 | Alternatives Penal Sanctions | Prepares individuals to practice as sentencing advocates on defense teams, as consultants to problem-solving courts, or as private presentence investigators hired by the defense to advocate for alternatives to incarceration. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 531 | Social Policy and Services I | Conceptual, analytical, and historical perspectives on the social welfare institution. Emphasizes poverty and inequality. Principles of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral of Social Work student |
| SWG | 532 | Policy and Social Change | Overview of the history, development, pertinent concepts, skills, and definitions associated with social welfare problems and policies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters of Social Work student |
| SWG | 533 | Diversity and Oppression in a Social Work Context | Explores issues of social inequality related to disability, ethnicity, gender, race, and sexual orientation. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student. |
| SWG | 534 | Diversity and Underserved Populations | Examines issues of privilege and oppression, including their impact on the social work process, with the goal of developing a culturally competent master's-level social worker. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters of Social Work student |
| SWG | 540 | The Professional Experience I | 150 clock hours of supervised social work practice plus seminar. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters of Social Work student; Co-requisite: SWG 512 |
| SWG | 541 | Field Practicum I | With SWG 542, two consecutive semesters (480 hours) of supervised social work practice in an approved placement. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Master or Doctor Social Work student; Pre/Co-requisite: SWG 510 with C or better if completed |
| SWG | 542 | Field Practicum II | See SWG 541. Fee. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 510 with C or better; SWG 541 with C or better; SWG 511 with C or better (or be enrolling in SWG 511) |
| SWG | 543 | The Professional Experience II | 250 hours of supervised social work practice plus seminar. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 5 | | Pre-requisites: Master of Social Work student; SWG 512 with C or better; Co-requisite: SWG 513 |
| SWG | 550 | Co-Occurring Disorders | Provides sound theoretical and practical orientations to working with persons who have co-occurring disorders. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 551 | Crisis Intervention | Covers the basics of crisis intervention in social work practice, along with applications to several different populations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 552 | Issues in School Social Work | Provides knowledge and skills necessary to implement effective social work services in a school setting. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 553 | Social Work with American Indians | Introduces social work issues relevant to Native Americans. Explores effective methods with Native American clients. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 554 | Substance Abuse | Psychological and sociocultural determinants of substance abuse. Overview of social policies and treatment approaches. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 555 | Social Work Practice Skills with Latinos | Focuses on communication skills necessary and appropriate for social work practice with Spanish-speaking clients and their families. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Credit is allowed for only SWG 555 or SWU 455 |
| SWG | 556 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 456, 556 or 591 (Immigrants and Refugees) |
| SWG | 557 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWG | 558 | Introduction to Behavioral Health Services | Explores mental health. Develops a basic understanding of mental health and co-occurring conditions. Gains an understanding of public- and employer-financed contemporary behavioral health services with a focus on Arizona models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Introduction to Behavioral Health Services) or 558 |

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| SWG | 559 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 459, 591 (Spirituality & Helping Profession), 598 (Spirituality and the Helping Professions) or 559 |
| SWG | 560 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Legal Issues in Social Work) or 560 |
| SWG | 561 | Lesbian, Gay Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 461, 498 (Lesbian and Gay Issues) or 561 |
| SWG | 570 | Aging: A Social Work Perspective | Biopsychosocial spiritual perspectives on aging, including intergenerational matters, international trends, policies, programs, services and issues unique to populations of the southwest. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWG 570 or 591 (Aging Soc Wk Perspective) |
| SWG | 571 | Mental Health Aspects of Aging | Older adult mental health assessment, treatment, planning, policy and service delivery from a cross-cultural, interprofessional, intergenerational, intentional and continuum-of-care perspective. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Mental Health & Aging) |
| SWG | 577 | Traumatic Death: Theory, Counseling and Practice | Explores the various experiences of grief, trauma and bereavement through a phenomenological perspective and using creativity, art, literature, poetry, indigenous wisdom and evidence-based research. Practice techniques and psychosocial care to the traumatically bereaved. Examines the micro, mezzo and macro aspects of death and grief in contemporary society. Theory, philosophy and direct practice with individuals, families and groups experiencing traumatic death and grief. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWG 577, 591 (Trauma & Death Counseling) or 598 (Trauma&Death: Counseling, Theory, &Practice Issues) |
| SWG | 579 | Critical Incident Stress Management | Theory and research behind coping strategies and mechanisms commonly experienced by Emergency Management Teams (EMT) and DHS. Explores topics of stress, trauma, vicarious trauma and mass trauma as experienced by the individual and large populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 585 | Macro Social Work Practice | Examines communities and human service organizations as social systems. Introduces strategies for initiating planned change. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisites: Master Social Work student |
| SWG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 600 | Foundation for Advanced Practice | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Master Social Work student. |
| SWG | 603 | Social Work Practice in Health/Behavioral Health Settings | Advanced social work practice in health and behavioral health settings, focusing on enhancement of client functioning and quality of life. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 604 | Advanced Social Work Practice in Health | Addresses the crucial social work practice issues of health and healthcare in the new millennium. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 with C or better |
| SWG | 606 | Assessment of Mental Disorders | Theories and concepts of mental health and illness. Attention to classification systems and nomenclature used in assessing mental disorders. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 502 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 608 | Ecological Approach to Practice with Children, Youth, and Families | Provides a theoretical and practical orientation to working with children, youth, and families from an ecological strengths perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 609 | Advanced Social Work Practice with Child Welfare Families | Focuses on substance abuse, family violence, and serious mental illness in practice with families and children in the child welfare system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 610 | Advanced Social Work Practice III | Assists students in advanced theoretical understanding and practice with families, groups, and communities. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW or MSW Adv Standing student; Co-Requirement: SWG 693 and 645 |
| SWG | 611 | Social Work with Families | Theory, concepts, and skills for working with diverse family populations. Emphasizes a systems and integrative approach. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |

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| SWG | 612 | Social Work with Groups | Practices applications of knowledge and skill to social work with groups. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 613 | Advanced Social Work Practice in Behavioral Health | Treatment of prevalent disorders encountered by social workers, selected from the following: anxiety disorders, personality disorders, depression, and schizophrenia. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 603 with C or better |
| SWG | 614 | Advanced Generalist Social Work Practice IV | Integrates a multilevel approach to practice with critical choice theories and interventions. Focus on groups, organizations, and communities and their impact on social work practice. Completion of the foundation courses or advance standing in the MSW program, or instructor approval, is required for all 600-level SWG courses. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG611 with a grade of C or better |
| SWG | 615 | Effective Intervention with Children and Adolescents | Provides a framework of knowledge, theories, and skills for effective social work practice with vulnerable children and adolescents. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW or MSW Adv Standing |
| SWG | 616 | Social Work with Chemically Dependent Families | Examines dynamics of the chemically dependent family and presents clinical approaches for intervening in the family system and subsystems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 611 with C or better |
| SWG | 617 | Advanced Social Work Practice with Children and Adolescents | Theory, research, and intervention that focus on children and adolescents. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 618 | Domestic Violence | Theory, research, intervention, and prevention strategies relevant to child maltreatment, partner abuse, and elder abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 611 with C or better |
| SWG | 619 | Practice-Oriented Research | Accelerated course in application of scholarly and scientific principles to field practice, problem formulation, interventional procedures, and impact assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 519 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 621 | Integrative Seminar | Explores the fit between theoretical frameworks and practice with clients. Requires presentation of empirical studies with clients. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 (or SWG 606 and 608) with C or better; Pre/co-requisites: SWG 604, 609, 613, 617, or 619 (with C or better is completed); SWG 641 (with Y if completed) |
| SWG | 623 | Program Evaluation | Research design techniques and data collection in human service agencies and communities. Analysis for program evaluation and needs assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 519 with C or better, SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 685 |
| SWG | 626 | Crisis Intervention and Short-Term Treatment | Comprehensive analysis of crisis and solution-focused brief intervention strategies and approaches used in advanced social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 630 | Brief Social Work Intervention | Concepts and techniques of solution-focused, systematic, and strategic approaches to therapy in the context of brief therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 631 | Advanced Policy Analysis | Supports advanced generalist practice with emphasis on policy analysis and philosophy and politics of resource allocation and social welfare. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW or MSW Adv Standing student |
| SWG | 632 | Social Policy and Services II | Develops advanced knowledge and skills in social welfare policy analysis, policy formulation, and advocacy and intervention for policy change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 531 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 633 | Child Welfare Services | Examines, using ecological and system theories, services that supplement, support, and substitute for parental care of children. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 641 | Advanced Practicum: Direct Practice I | With SWG 642, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) major. Pre- or corequisite(s): SWG 603 (or SWG 608) with C or better if completed |
| SWG | 642 | Advanced Practicum: Direct Practice II | With SWG 641, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 or 608 with C or better; SWG 641 with Y; Pre or Co-requisite: SWG 604, 609, 613 or 617 (with C or better if completed) |
| SWG | 643 | Advanced Practicum: Planning, Social Work Administration, and Community Practice I | With SWG 644, two consecutive semesters (480 hours) in social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Planning, Administration and Community Practice) major. Pre- or corequisite(s): SWG 623, 685 with C or better if completed |
| SWG | 644 | Advanced Practicum: Planning, Social Work Administration, and Community Practice II | See SWG 643. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 623 with C or better; Prerequisite(s): SWG 623, 685 with C or better, SWG 643 with grade of Y. Pre- or corequisite(s): SWG 681, 682 with C or better if completed |
| SWG | 645 | The Professional Experience III | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student; SWG 542 with Y grade OR MSW Advanced Standing student; Co-requisite: SWG 610 and SWG 693 |
| SWG | 646 | The Professional Experience IV | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Standard MSW or MSW Adv Standing student; SWG 645 with Y grade; Co-requisite: SWG 614; SWG 693 |
| SWG | 650 | Social Work Ethics/Law | | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 653 | Introduction to Holistic Therapies | Provides advanced theoretical knowledge and family treatment models for the practice of social work with families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: must be enrolled in a graduate-level program (degree-seeking or non-degree-seeking) |
| SWG | 654 | Introduction to Sexual Abuse | Develops general knowledge and skills for working with persons who have been impacted by sexual abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 655 | Quality of Life | Addresses key elements of a healthy life style contributing to wellness and disease through experiential learning and evidenced-based research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 656 | Treating the Whole Person | Addresses treating the "whole person's" physical and behavioral health through interviewing, intervention, and treatment within the context of an interdisciplinary model. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SWG | 657 | Ancient Healing Traditions | Historical development and research of the ancient healing teachings of traditional Chinese medicine, Ayurvedic medicine, homeopathic, naturopathic, and indigenous medicine and how they are used in today's health systems. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 660 | Clinical Supervision in Social Work. | Examines and practices the knowledge, skills, and values of becoming a social work supervisor in human service agencies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWG | 661 | Cognitive Behavior Therapy Across the Lifespan | Knowledge and skills to understand and apply cognitive-behavioral approaches to treatment (CBT), including diagnostic information and empirically supported interventions targeted to individuals, families and groups across the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Cognitive Behavior Therapy Across Lifespan) or 661 |
| SWG | 662 | Social Work Practice With Adolescents | Advanced elective focuses on working with adolescents in a variety of intervention settings (e.g., mental health agencies and schools). | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Social Work Practice With Adolescents) or 662 |
| SWG | 663 | Clinical Trauma Treatment | Explores the assessment and treatment of PTSD in people throughout the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Clinical Trauma Treatment) or 663 |
| SWG | 664 | Evidence-Based Approaches to Treatment of Substance Use Disorders | Knowledge and skills to understand substance abuse disorders, including diagnostic information and evidence-based interventions targeted to individuals, families and groups. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Treatment Substance Use Disorders) or 664 |
| SWG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | IND | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 681 or SWG 682 with C or better; Pre/ Co-requisite: SWG 623 with C or better if completed |
| SWG | 681 | Social Work Administration | Administrative skill building and theory application within human service nonprofit social work settings. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 623 with C or better; SWG 685 with C or better; Co-requisite: SWG 682 |
| SWG | 682 | Community Participation Strategies | Reviews strategies to involve citizens and the consumers of social and human services in community decision-making systems. Participation is viewed as a means to facilitate the empowerment of oppressed peoples. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 623 with C or better; SWG 685 with C or better; Co-requisite: SWG 681 |
| SWG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 685 | Program Planning in Social Services | Social services planning process; includes needs assessment, goals and objectives, program design, budgeting, management information systems, and program evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y; SWG 585 with C or better. Corequisite(s): SWG 682 |
| SWG | 686 | Developing Grants and Fund Raising | Identifies potential funding sources, technical and interpersonal/political aspects of proposal development and fund raising. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s); degree- or nondegree-seeking graduate student |
| SWG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: MSW or MSW Advanced Standing student |
| SWG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisites: MSW, MSW Adv Standing, or PhD student |
| SWG | 697 | Special Topics in Working with Diverse Groups | Provides practice strategies for clients of specific marginalized groups; addresses access to resources; describes the larger political context and policy issues that impact the particular group. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWG | 700 | Research Methods | Course on research methods in a specific discipline. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 718 | Qualitative Research Methods | Provides comprehensive qualitative research methods training for doctoral students to complement their quantitative survey research methods knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 718 or 791 (Qualitative Research Methods) |
| SWG | 719 | Quantitative Research Methods | Provides the tools for independently designing and conducting methodologically sound, ethical, quantitative research that advances social work and social welfare knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student |
| SWG | 720 | Philosophy of Science Issues in Social Work | Critical examination of social science, social work practice, and policy in terms of philosophical assumptions and varying frames of reference. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |

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| SWG | 721 | Statistics | Logic and application of statistical methods for analyzing social welfare-based data pertaining to social work. Includes ethical issues concerning the appropriate application, interpretation and use of social research, as well as the potential limitations and biases of applications that fail to adequately consider issues of population diversity. Students learn to independently design a research project from start to finish employing statistical analysis of primary data. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: doctoral major |
| SWG | 722 | Pedagogy in Social Work | Prepares doctoral students to teach for the profession of social work. Provides an opportunity for students to develop or enhance their philosophy of teaching, their attitudes toward learning, teaching and students, and the knowledge and skills necessary to teach effectively. Explores teaching to the diverse students present in social work programs, the challenges that teaching presents and the responsibilities that come with social work education. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Doctoral student; Credit is allowed for only SWG 722 or SWG 791 (Pedagogy in Social Work) |
| SWG | 723 | Proposal Development | Provides an opportunity for doctoral students to formulate a dissertation proposal or a research plan for a three-paper option. Provides a forum for presenting ideas, receiving feedback and defending one's proposal. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 723 or 791 (Proposal Development) |
| SWG | 731 | Welfare State | Examines the evolution of the welfare state as a problem of political economy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 731 or 791 (Welfare State) |
| SWG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | |
| SWG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWU | 171 | Introduction to Social Work | Descriptive and historical perspectives of social problems, social justice issues and society's response to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & H | |
| SWU | 180 | Introduction to Lesbian, Gay, Bisexual and Transgender (LGBT) Studies | A historical, socio-cultural introduction to lesbian, gay, bisexual, transgender, transsexual, and intersexed communities and their resilience to challenges and barriers. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Credit is allowed for only SWU 180 or 194 (Introduction to LGBT Studies) |
| SWU | 181 | Economics: A Social Issues Perspective | Introduces economic principles through the lens of contemporary social issues for social work and related fields. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 181 or 194 (Economic and Social Issues in Perspective) |
| SWU | 182 | Arizona and National Government: A Social Work Perspective | Government and the role of policy practice in advancing social and economic justice and effective social services within the southwest. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Credit is allowed for only SWU 182 or 194 (AZ/National Government: Social Work Perspective) |
| SWU | 183 | Introductory Ethics: A Social Issues Perspectives | Introductory exploration of ethics from a historical and multicultural perspective viewed through the lens of contemporary social issues. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 183 or 194 (Intro Ethics: Social Issues Perspective) |
| SWU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 250 | Stress Management Tools | Helps students develop an understanding and behaviors to create a healthy balance in their lives by studying the bio/psycho/social aspects of wellness. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | |
| SWU | 291 | Social Service Delivery Systems | Federal, state, private not-for-profit and for-profit social service delivery system's purpose, structure, and professional roles. Includes 40 volunteer hours. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: PSY 100, PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU 171 with a C or better if completed |
| SWU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | SB | |
| SWU | 295 | Foundations of Social Work Practice | Theoretical foundation and skill base for effective culturally competent communication and interviewing with individuals, families, small groups, and larger systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Pre-requisites: PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU171 or 271 and SWU 291 with a C or better if completed |
| SWU | 302 | Human Biology for Social Workers | Overview of human anatomy and physiology, and the reciprocal relationship between physical and social environments. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWU | 303 | Micro Human Behavior and the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | L or SB | Pre-requisites: PSY 101 (PGS 100, PGS 101), SOC 101 or SOC 301; Pre or Co-requisites: SWU 171, SWU 291 and SWU 295 (with C or better if completed) |
| SWU | 310 | Social Work Practice I | Introduces social work methods, emphasizing the following skills: relationship development, cross-cultural interviewing, communication patterns, and case-recording. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 171 or SWU 271 with C or better; SWU 291 with C or better; SWU 295 with C or better; Pre or Co-requisite: SWU 303 (with C or better if completed) |
| SWU | 320 | Research Methods in Social Work | Applies scientific principles to field practice, problem formulation, intervention procedures, and impact assessment in social work. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre/Co-requisite: SWU 310 with C or better if completed |

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| SWU | 321 | Statistics for Social Workers | Teaches social work students how to use and interpret descriptive and inferential statistics in social work practice. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | CS | Pre-requisites: MAT 142 or an MA general studies course |
| SWU | 331 | Social Policy and Services I | History, philosophy, and values of social welfare; function and role of social welfare in society; development of the social work profession and practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | H | Pre-requisites: Social Work student; ECN 111 or 211, POL 110 or POL 310 or POS 110 or POS 310, SWU 171 or SWU 271 with C or better; SWU 291 with C or better |
| SWU | 332 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ECN 211 or PAF 201 or SWU 181; SWU 310 with C or better |
| SWU | 337 | Early Childhood Intervention | Explores how child development theory affects practice with children and families, emphasizing development of young children and early intervention. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWU | 340 | Macro Human Behavior and the Social Environment | Human behavior in the social environment, focusing on groups, organizations and communities and examining theoretical perspectives in a macro context | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Pre-requisite: SWU 303 (SWU 301) with C or better; Pre/Co-requisite: SWU 310 with C or better if completed |
| SWU | 374 | Diversity and Oppression in a Social Work Context | Issues of social inequality related to race, ethnicity, gender, sexual orientation, and disability. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre/Co-requisite: SWU 310 with C or better if completed |
| SWU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisite: Master of Social Work student |
| SWU | 402 | Human Behavior in the Social Environment II | Sequel completing study of life span development and behavior which forms base for social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Pre-requisites: SWU 303 with C or better |
| SWU | 410 | Social Work Practice II | Knowledge and skills in social work practice with individuals and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 310 with C or better; PHI 101 (or PHI 105, 306 or SWU 183); BSW Social Work major. Corequisite(s): SWU 412, 413 |
| SWU | 411 | Social Work Practice III | Knowledge and skills in social work practice with groups, communities, and organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 410, 412, or 413 with C or better or Co-requisites: Social Work student with SWU 414; SWU 415 |
| SWU | 412 | Field Instruction I | 16 hours a week of supervised practice in an approved placement. "Y/E" grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 413 |
| SWU | 413 | Field Instruction Seminar | Field-focused seminar, including practice evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 412 |
| SWU | 414 | Field Instruction II | 16 hours a week of supervised practice in an approved placement. Y/E grade only. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 410, SWU 412 or SWU 413 with C or better; Co-requisites: SWU 411 and SWU 415 |
| SWU | 415 | Integrative Field Seminar | Field-focused seminar to help students integrate practice and theory. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Social Work student; SWU 410, SWU 412 or SWU 413 with C or better; Corequisite(s): SWU 411 and SWU 414 |
| SWU | 420 | Practice-Oriented Research | Applies scientific principles to field practice, problem formulation, intervention procedures, and impact assessment in social work. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWU | 432 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ECN 211 (or SWU 181); POS 110 (or POS 310 or SWU 182); SWU 310 with C or better; Social Work major. Corequisite(s): SWU 410, 412, 413 |
| SWU | 442 | Introduction to Practice with Children and Families in Child Welfare | Focuses on the characteristics, strengths, and service needs of families and children in the Child Welfare System. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Social Work student; SWU 410 with C or better; SWU 412 with C or better; SWU 413 with C or better |
| SWU | 444 | Issues in School Social Work | Demonstrates how community, family, and school are interdependent using an ecological metaphor, and introduces school social work. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Social Work student; SWU 410 with C or better; SWU 412 with C or better; SWU 413 with C or better |
| SWU | 455 | Social Work Practice Skills with Latinos | Focuses on communication skills necessary and appropriate for social work practice with Spanish-speaking clients and their families. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Credit is allowed for only SWG 555 or SWU 455 |
| SWU | 456 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 456, 498 (Immigrants & Refugees) or 556 |
| SWU | 457 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWU | 458 | Behavioral Health Services | Behavioral health conditions; their impact on the individual, family and community; and historical and contemporary service models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 458, 498 (Behavioral Health Services) or 558 |
| SWU | 459 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 459, 494 (Spirituality and the Helping Professions), 498 (Spirituality & Helping Profession) or 559 |
| SWU | 460 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 460, 498 (Legal Issues in Social Work) or 560 |
| SWU | 461 | Lesbian, Gay, Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 461, 498 (Lesbian/Gay Issues) or 561 |
| SWU | 474 | Ethnic/Cultural Variables in Social Work | Basic conceptual approach to understanding ethnic and cultural variables of southwestern ethnic minorities and how these factors influence social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: SWU 310 with C or better |
| SWU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | | Prerequisite(s): Barrett Honors student |
| SWU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SWU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-7 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SWU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-3 | | Pre-requisite: Bachelor of Social Work student |
| TBX | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0.33-12 | | Prerequisite(s): Thunderbird Teach-Out students |
| TCL | 101 | Introduction to Transborder Chicana/o and Latina/o Studies | Historical and contemporary issues in Chicana/o and Latina/o communities; focuses on the diverse economic, sociological, cultural, and political status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 111 | Introduction to Transborder Chicana/o and Latina/o Culture | Interdisciplinary analysis of customs, values, belief systems, and cultural symbols; special attention is given to cultural continuity and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 201 | Transborder Society and Culture I: Interdisciplinary Approaches | Intensive overview of Mexican origin and Latina/o populations through various sociological, historical, anthropological, economic, political, cultural, literary, and analytical lenses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 202 | Transborder Society and Culture II: Contemporary Issues | Examines contemporary transborder belief systems, ideologies of health, gender, familial structures, and community development within a transnational context. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| TCL | 211 | Transborder Chicano/a and Latina/o Poetry | Writing seminar on Chicana and Chicano poetics and intensive creative writing workshop. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 220 | Transborder Latina/o Expressive Culture | Examines media, literature, performance, and visual art grounded in the historical experiences of transborder Latina/o communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | |
| TCL | 230 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| TCL | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Credit is allowed for only FMS 270 or TCL 270 |
| TCL | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| TCL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 303 | Transborder Theory | Studies historical, cultural, and economic theories contributing to understanding the emergence of Mexican and Latina/o origin populations in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 304 | Transborder Research Methods | Emphasizes critical skills: quantitative/qualitative, spatial, archival, and reflexive methodologies, including ethnographic, biographical, historical, and mapping. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 305 | Transborder Practicum and Field Research. | Field work with faculty incorporating practical experience while honing research skills and ability. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre or Co-requisites: TCL 303 and TCL 304 with C or better if completed |
| TCL | 310 | Transborder Chicano/a and Latina/o Folklore of Southwest North America | Analyzes Chicana and Chicano folk beliefs, traditions, and practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 314 | Transborder Regional Immigration and Economy | Historical/contemporary overview of Mexican immigration into and within the U.S.; factors affecting population movement, settlement patterns, and migrants' incorporation into society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & H & C | |
| TCL | 315 | Chicana/o and Latina/o Family Structures | Traditional and changing family relationships; emphasis on gender and intergenerational relations and impact of modern society on traditional family values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 321 | Transborder Community Development and Health | Emphasizes core concepts and practices relevant to regional community development and health, including demographic health indicators, individual, and community models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 323 | Latino Health Issues | Health issues among Chicanos and other U.S. Latinos; interplay among political economy, health, family, culture, and community. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 4 | SB & C | |
| TCL | 326 | Health of Chicanas and Latinas | Examines gender, ethnicity, and health; critical issues affecting health status of Chicanas and Latinas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 327 | Health and Migration | Focuses on health status among various immigrants; health trajectories following migrations, adaptive behaviors, health practices, and the role of policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 328 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: Minimum 24 earned hours; ENG 102, 105, or 108 with C or better; Credit allowed for only REL 326 or TCL 328 |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TCL | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| TCL | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| TCL | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and African Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| TCL | 340 | Chicana/o and Latina/o Politics and Policy | Historical/contemporary analysis of Chicana and Chicano political ideologies, attitudes, strategies, and movements; relations with governmental agencies; and public policy issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | |
| TCL | 341 | Policy Issues in Chicana/o and Latina/o Urban Settings | Historical, demographic, and sociological overview of the status of Chicanas and Chicanos in urban settings as well as the public policy relevance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 342 | Social Demographics of Latino Populations | Provides an introduction to social demography of Latinos in the U.S. from the 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 350 | Transborder Mexican and Chicano/a Artistic Production | Overview of Mexican and Mexican American artistic production from colonial times to present; emphasis on religious and folk art. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C & G | |
| TCL | 351 | Transborder Chicano/a and Latina/o Art | Intensive analysis of contemporary Chicana and Chicano art movement as appraised within the context of contemporary American art and the art of Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| TCL | 360 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| TCL | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Pre-requisites: ENG 101, 105 or 107; Credit is allowed for only ENG or TCL 363 |
| TCL | 364 | Transborder Mexican Literature Before 1917 | Offers a historical panoramic view of the political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. May be taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Prerequisite(s): minimum 45 hours |
| TCL | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | |
| TCL | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |
| TCL | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| TCL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 410 | Race, Medicine, and the Body | Explores how body and embodiment and race and ethnicity are constructed within and by biomedical sciences and technology development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L | Prerequisite(s): ENG 101, 105 or 107 with C or better; minimum 45 hours |
| TCL | 422 | U.S.-Mexico Border Health | Focuses on identifying health issues affecting Latino/Mexican families in the U.S.-Mexico borderlands using basic epidemiological techniques to analyze regional data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: TCL 321 with C or better |
| TCL | 424 | Theory and Practice of Community Development and Health | Foundations of methodology of community mapping and establishment of community diagnosis, media literacy and advocacy applications for community-based public health. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: TCL 321 with C or better |
| TCL | 443 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | |
| TCL | 444 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| TCL | 445 | Transborder Latin American Short Story | Studies the modern Latin American short story, with primary focus on the development of its literary and cultural tradition. Taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L or HU | Prerequisite(s): SPA 202 (or SPA 204); minimum 45 hours |

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| TCL | 446 | Comparative Bilingual Latina/o Poetics | Comparative study of contemporary bilingual Latina/o poetry. Focuses on two specific U.S. ethnic minority groups—Mexican- (or Chicanos) and Puerto Rican-Americans (or nuyorican)—who have long and strong literary traditions of bilingual poetry. The significant feature of both bodies of poetry is the interactive mixture of their base languages: Spanish and English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only TCL 446 or 598 (Comparative Bilingual Latina/o Poetics) |
| TCL | 447 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| TCL | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| TCL | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS or TCL 465 |
| TCL | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only FMS or TCL 466 |
| TCL | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |
| TCL | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | |
| TCL | 485 | Chicana and Latina Writers | Critical reading of Mexican American women authors; emphasis on contemporary (post-1970) poetry, novels, short stories, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | |
| TCL | 488 | Border Global Narratives | Studies four general and different border areas through literature. Through literary-cultural texts, looks into peoples' experiences of migration to and from the homelands of Mexico, Haiti, the Dominican Republic, Cuba, and the Puerto Rican isle to the U.S. These experiences are never uni-directional but are characterized by constant back-and-forth movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Credit is allowed for only TCL 488 or 598 (Border Global Narratives) |
| TCL | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 credit hours; Credit is allowed for only TCL or WST 490 |
| TCL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| TCL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TCL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-7 | | Prerequisite(s): Transborder Chicana/o and Latina/o Studies (Media and Expressive Culture or Transborder Community Development and Health or U.S. and Mexican Regional Immigration Policy and Economy) major; minimum 56 hours |
| TCL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| TDM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 205 | Introduction to Travel and Tourism | Examines the components of the travel and tourism industry at the state, national, and global levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| TDM | 225 | Introduction to Resort and Hotel Management | Introduces local, national and international lodging and food service industries. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TDM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| TDM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| TDM | 345 | Meeting and Convention Planning | Basic aspects and skills in planning meetings and conventions. Industry and market overview of certified meeting planners. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 350 | Tourism Marketing | Critical examination of marketing principles; applications to travel, tourism, and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better; Minimum 45 hours |
| TDM | 360 | Policy, Planning, Development of Recreation and Tourism Resources | Investigates the policy, planning, development, and management practices related to the provision of recreation and tourism opportunities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 372 | Tourism Planning | Applies economic and regional development concepts and theories to destination product development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Pre-requisites: Tourism Development & Mgmt or Recreation (Tourism) students; Minimum 2.50 gpa; Minimum 45 hours; TDM 205 or RTM 373 with C or better; ENG 102 with C or better; MAT 142 or higher with C or better |
| TDM | 386 | Convention Sales and Management | The role of convention and visitors bureaus or resort managers, including economic impacts of markets, structure, governance, membership, and advertising. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 401 | Tourism Management | Basic principles of administration and their application in successful administrative situations. Analyzes administrative function, structure, and policies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 201 or PRM 210 or TDM 210 with C or better; CRD 301 or PRM 301 or TDM 301 or TDM 301 with C or better; PRM 303 or TDM 372 with C or better |
| TDM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| TDM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 with C or better; NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| TDM | 415 | Tourism Transportation Systems | Examines the role of various modes of transportation in domestic and international tourism development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 448 | Heritage and Cultural Tourism | Provides a solid conceptual understanding of the issues, problems, and management implications associated with heritage and cultural tourism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 with C or better; Credit is allowed for only TDM 448 or CRD 598 Heritage and Cultural Tourism) |
| TDM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 458 | International Tourism | Global examination of international tourism and its significance as a vehicle for social and economic development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| TDM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| TDM | 480 | Sustainable Tourism | Tourism has a multitude of impacts, both positive and negative, on people's lives and on the environment. Critically analyzes the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 120 or TDM 205 or 60 minimum hours |
| TDM | 481 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Defines sustainable development, explains the importance of sustainable food systems, recognizes the relationship between local food systems and global food challenges. Connects the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; defines leakage in reference to tourism and food. Creates and applies sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Junior standing; Minimum 60 hours |
| TDM | 482 | Sustainable Revenue Management | Introduces the fundamental economic principles that underlie revenue management and the practical application of new analytical technological services in the hotel and resort industry. Uses experienced revenue managers from local resorts and hotels as regular guest speakers and IdeaS system (a revenue management analytics subsidiary of SAS). | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: MAT 142 or higher; Minimum 72 hours |
| TDM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |

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| TDM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; 72 minimum hours; 2.50 GPA or higher; Non SCRD majors |
| TDM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TDM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| TDM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| TDM | 520 | Sustainable Thinking in Tourism | First in a series of two courses introducing students to the basic concepts of sustainability and their application and implications for tourism. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 521 | Sustainable Thinking in Tourism 2 | Second in a series of two courses focusing on how to measure, assess, and plan for sustainability in the tourism industry. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 2 | | Pre-requisite: TDM 520 with C or better |
| TDM | 530 | Sustainable Tourism Destination Planning and Management I | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 531 | Sustainable Tourism Destination Planning and Management II | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 2 | | Prerequisite(s): TDM 530 |
| TDM | 540 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Students learn to define sustainable food development, explain the importance of sustainable food systems, recognize the relationship between local food systems and global food challenges, connect the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; define leakage in reference to tourism and food; and create and apply sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 550 | Managing the Sustainable Tourism Business | Through case study analysis, students learn how sustainability impacts business operations, how successful sustainable businesses identify and assess alternative resource management techniques, and evaluate operational models for embedding sustainability practices into their business models. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) TDM 570; Credit is allowed for only TDM 550 or CRD 598 (Managing the Sustainable Tourism Business) |
| TDM | 561 | Best Practices Workshop Preparation | First in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A destination or business is identified to be used as a case study. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre/co-requisite: TDM 521 with C or better |
| TDM | 562 | Best Practices Workshop Presentation | Second in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A presentation of a best practices case study is conducted for the class. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: TDM 561 with C or better |
| TDM | 570 | Sustainable Tourism | Critically examines the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 101 | The Teachers College Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges, and opportunities of their university. Mary Lou Fulton Teachers College sections relate specifically to future educators. Covers several core college success topics. | N | SEM | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Mary Lou Fulton Teachers College Freshmen student |
| TEL | 111 | Exploration of Education | Education as an instrument in the development of the individual and society and its significance as an American Institution. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| TEL | 200 | Introduction to Community Embedded Learning | Students spend a minimum of 3 hours per organization touring and interviewing key personnel and service recipients. Total hours in volunteer capacity is 15 hours to pass the course. Volunteer capacity can take place at sites such as schools, youth programs, health services, social services, environmental programs, government agencies, directly serving a population in need or supporting activities that contribute to the greater good of children and youth within their communities. Course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of diversity and how to contribute to positive social change in communities. Also provides students with "real-world" experiences in communities to further develop their own academic skills and career exploration. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| TEL | 212 | Understanding the Culturally Diverse Child | Surveys cultural and linguistic diversity in American education, including education equity, pluralism, learning styles, and roles of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Credit is allowed for only MCE 230 or TEL 212 |
| TEL | 215 | Introduction to Child and Adolescent Development | Emphasizes the cognitive, social-emotional, and physical domains of child and adolescent development. From a knowledge base of theory, research, and current issues, students apply learning to developmentally appropriate principles and practices that guide relationships and learning experiences for all children. Uses available technologies; emphasizes the complex ecosystem of culture, ethnicity, family, and school. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 300 | The Community Embedded Experience | Students select two organizations that match their own interests and talents and spend a minimum of 10 hours per organization volunteering in a service capacity to understand the organization from an insider's viewpoint. Students volunteer a total of 20 hours to pass the course. Volunteer capacity can take place at sites such as schools, youth programs, health services, social services, environmental programs, government agencies, directly serving a population in need or supporting activities that contribute to the greater good of children and youth within their communities. Course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of diversity and how to contribute to positive social change within communities. Provides students with "real-world" experiences in communities to further develop their own academic skills and career exploration. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200 |
| TEL | 311 | Instruction and Management in the Inclusive Classroom | Planning and delivering instruction, organizing and managing classrooms, and making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 313 | Educational Technology in the K-12 Curriculum | Focuses on using technology in an education setting and addresses the integration of technology in curricular areas for all students. Students receive a broad-based introduction to using and integrating technology into many different educational settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 56 hours |
| TEL | 314 | Classroom Assessment | Assessment and evaluation of student learning; emphasizes integration and adaptation of curriculum, instruction, and evaluation of all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 315 | Child and Adolescent Development | Physical, cognitive, social, and emotional development during childhood and adolescence; developmentally appropriate principles and practices to facilitate development for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L or SB | |
| TEL | 316 | Teaching, Imagination, and Creativity | Engages students in critical thinking and the complex terrain of aesthetic theory and intellectual, academic work and teaching practice. Students apply aesthetic consciousness teaching by teachers developing imagination, creativity, and intuition as tools to use every day in their classrooms. Emphasis on how teachers can integrate the arts into the curriculum, use the arts to support academic content, and develop aesthetic consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. The arts will also be studied as multi-cultural and socio-cultural phenomena, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society. consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. Also studies the arts as multicultural and sociocultural phenomena in support of these ends, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Education majors; Minimum junior standing |
| TEL | 320 | Introduction to Gifted Education | Overview of a variety of issues related to gifted students from preschool through high school. Provides background in order to create an optimal experience for students, parents and teachers when working with gifted students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| TEL | 400 | Leading and Sustaining Community Embeddedness | Students spend a minimum of 30 hours in one organization volunteering in a service capacity to understand the organization from an insider's viewpoint and address course topics/issues. Volunteer capacity can take place at sites such as schools, youth programs, health services, social services, environmental programs, government agencies, directly serving a population in need or supporting activities that contribute to the greater good of children and youth within their communities. Course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of diversity and how to contribute to positive social change within communities. Also provides students with "real-world" experiences in communities to further develop their own academic skills and career exploration. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200, 300 |
| TEL | 410 | Community Impact | Provides students with the opportunity to develop an action plan aligned to community experiences. While in the process of developing an effective action plan, students have reflection opportunities that examine community needs, the importance of civic engagement via volunteerism, and the effects of social injustice in global societies. Through 40 hours of dedicated service at a pre-approved organization (e.g. youth programs, health services, social services, environmental programs, government agencies) students have the opportunity to develop an action plan supporting activities that contribute to the greater good of a community. Classroom seminars provide a forum for critical thinking and problem solving of cultural diversity, citizenship and how to contribute to positive social change in our community. Course provides "real-world" experiences that exercise advanced academic skills and knowledge applicable to each student's program of study and career goals. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200; 300; 400 |
| TEL | 420 | Curriculum Strategies for Gifted Learners | Overview of a variety of ways in which to create and adapt curriculum for gifted students from preschool through high school. Provides a broad range of resources for classroom teachers to use in order to help gifted students work to their full potential in a heterogeneously grouped classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 430 | Learning Outside of School | Studies and methods from a variety of nonschool environments for learning and development. Teaches knowledge and skills such as methods of identifying and evaluating free-choice learning that occurs through museum going, hobbies, family learning, media, community programs, sports, public health campaigns, and more. Covers career opportunities for educators in key creative environments besides classrooms. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 430 or 494 (Learning Outside of School) |
| TEL | 431 | Learning in Workplaces | School isn't the only place where people learn! Once you get a job, most of what you learn will occur as you do your job, and that kind of learning is crucial to the development of competence and expertise. Surprisingly, seventy to eighty percent of this important learning takes place outside of formal training. Studying learning in workplaces illuminates how learning happens universally, and helps teachers and trainers design effective educational programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 431 or 494 (Learning in Workplaces) |
| TEL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| TEL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| TEL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| TEL | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| TEL | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TEL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 607 | Critical Social Theory and Education | Seminar exploring education through the lens of critical social theory originating in the Frankfurt School. Marxian theory is updated to confront current situations through the ideas of alienation, base and superstructure, hegemony, ideology, and culture theory as well as a vision of human consciousness. Includes Pierre Bourdieu's theory of habitus, social or cultural capital, and field. Studies various critical education scholars as applications of critical social theory. Examines critiques of critical theory. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only DCI 691 (Critical Social Theory) or TEL 607 |
| TEL | 683 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| TEL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | GRD | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 706 | Introduction to Doctoral Studies | Prepares doctoral students for success, focusing on balance and identity, communities of practice, leadership and innovation, action research, and organization systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Leadership and Innovation EdD major; Credit is allowed for only TEL 598 (Introduction to Doctoral Studies) or 706 |
| TEL | 711 | Strategies for Inquiry | Develops knowledge and skills for research and program evaluation that foster innovation in education that leads to improved student learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 712 | Mixed Methods of Inquiry | Methods for combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 713 | Applied Mixed Methods of Inquiry | Data collection, analysis, interpretation in studies combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 795 | Continuing Registration | | N | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TEL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 100 | Seminar in Entrepreneurship | Exposes students to careers in entrepreneurship by inviting diverse entrepreneurs to discuss their businesses and backgrounds and share their stories on starting and growing their ventures. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Credit is allowed for only TEM 100, TEM 194 (Entrepreneurship) or OMT 191 (Entrepreneurship) |
| TEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 200 | My Technology Venture | Introduces the concept of entrepreneurship through venture practice and self-reflection to help students understand their potential roles in a technology-driven marketplace. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110; Credit is allowed for only TEM 200, 294 (My Technology Venture) or TMC 294 (My Technology Venture) |
| TEM | 230 | Creativity and Business Innovation | Introduces concepts, models and techniques of creativity and innovation. Exposes processes related to developing creative skills and habits with an emphasis on problem solving and design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Minimum sophomore standing; Credit is allowed for only TEM 230, TEM 394 (Technology Entrepreneurship) or TMC 394 (Technology Entrepreneurship) |
| TEM | 250 | Design Methodology | Outlines product design method and provides opportunity to apply it to a design project including identifying needs, setting target specifications, generating and selecting concepts, prototyping and testing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 250 or OMT 294 (Design Methodology) |
| TEM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 311 | Opportunity Analysis | The key to making sound business decisions involves the careful analysis of the situation, intelligent use of research, and successful practice. Entails the research and implementation of strategy to determine consumer expectations utilizing the skills especially important in today's competitive and turbulent market. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TEM 200 (or TMC 110) |
| TEM | 330 | Systems Innovation | Systems thinking course that investigates how innovators can incorporate the knowledge of complex systems into the processes of technology development, product/service innovation and venture development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 330 or TEM 394 (System Innovation) |
| TEM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 400 | Technology Entrepreneurship | Introduces opportunities and challenges that accompany starting and operating an entrepreneurial venture by exploring the fundamentals and principles of entrepreneurship suitable for undergraduate business and technology students. Provides real-world, hands-on learning on what it's like to successfully transfer knowledge into products and processes that benefit society. Engages students with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 400, TEM 394 (Technology Entrepreneurship) or OMT 494 (Tech Entrepreneurship) |
| TEM | 420 | Statistics for Industry | Covers topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis. Provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems. Where possible, explores problems from the students' disciplines to insure that the principles of statistics and probability are studied in the context of the students' chosen field. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: MAT 117 or any MA General Studies course |
| TEM | 431 | Innovation Management | Focuses on execution challenges that innovation initiatives face, including: (a) Resources: Where do the resources for innovation initiatives come from? (b) Organization: How should innovation initiatives be organized? (c) Planning: How should plans for innovation initiatives be written and through what kind of process should they be revised? Explores the processes of innovation management for various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 431 or TEM 494 (Innovation Management) |
| TEM | 450 | Design for the Developing World | Learn the product design process; improve the lives of poor residents in communities at the base of the economic pyramid who earn less than \$2/day. Help improve health, energy and clean water issues among others by joining with GlobalResolve, an ASU program in the College of Technology and Innovation whose goal is to help reduce poverty through technological innovation and entrepreneurship. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Junior, Senior or Graduate standing; Credit is allowed for only TEM 450 or TEM 494 (Design for the Developing World) |

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| TEM | 455 | Global Impact Entrepreneurship | Increases awareness and understanding of the complex nature of global poverty. Students think comprehensively about sustainable ways to address by focusing on business ventures and product design, which take advantage of local resources, networks and institutions. Students design and refine technologies and services that address the needs of communities in the developing world. Examines piloted technological innovations by ASU students in the west African nation of Ghana, India, and Latin American countries such as Mexico and Peru. Analyzes technological initiatives that have been piloted in Ghana and Peru, and attempts to create sustainable business ventures for them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Junior, Senior or Graduate (degree or nondegree) student. Credit is allowed for only TEM 455 or OMT 494 (Global Impact Entrepreneurship) |
| TEM | 460 | Lean Six Sigma Green Belt Certification | Six Sigma and Lean are fast becoming required knowledge for professionals involved in helping their companies streamline productivity and improve performance. Provides a focused and measurable management discipline, structured to reduce product and service failure rates to near perfection. Explores how Six Sigma and Lean strategies and tactics fit into a larger management systems and how to apply these techniques to solve and prevent critical business process problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 460 or OMT 494 (Lean Six Sigma Green Belt Certification) |
| TEM | 480 | Focus Area Project | Student research project that synthesizes knowledge across the core and the student's selected focus area. Examines a practical challenge that demonstrates technical competence related to technological entrepreneurship and management. Enhances the student's ability to focus on a topic, conduct research and present findings. | N | LEC | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 330 (or TEM 394 or TMC 394 System Innovation) or Junior standing |
| TEM | 481 | Consulting Project | Students learn about technology entrepreneurship through consulting with leaders and owners of businesses, not-for-profit organizations and government agencies. Requires both out-of-class consulting projects and in-class instructional sessions focused on technology entrepreneurship and business strategy, including financing, promoting, leading and growing the venture and consulting skills. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| TEM | 482 | Startup Workshop | Students launch their own technology-based ventures with collaboration and mentorship from colleagues and faculty. Explores the fundamentals and principles of entrepreneurship suitable for undergraduate technology entrepreneurship. Provides real-world, hands-on learning on what fits to successfully transfer knowledge into products, processes and services that benefit society. Engages with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| TEM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| TEM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 505 | Lean Process Improvement | Develops an understanding of individual and group decisions and responsibilities for process design and improvement in work settings. Covers common problems and success stories and qualitative and quantitative techniques to measure progress toward organizational goals for a variety of industrial business situations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 530 | Statistics Bootcamp for Industry | Provides foundational coverage of topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis, appropriate for first-year graduate students. Additionally, provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems from technology, entrepreneurship, aviation and psychology. Where possible, explores problems from the student's discipline to insure that the principles of statistics and probability are studied in the context of the student's chosen field. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only TEM 530 or 598 (Statistics Bootcamp for Industry) |

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| TEM | 531 | Disruptive Innovation and Technological Evolution | Focuses on the processes of innovation management of various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams, with an emphasis on disruptive innovation and the evolution and forecasting of technology. Provides a survey of innovation management concepts and various technological forecasting and prediction approaches, both mathematical and nonmathematical, in conjunction with a study of the evolution of selected technologies and the management problems associated with emerging technologies. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 532 | Advanced Analysis of Systems | Introductory course in systems analysis and modeling. Develops basic competence in formulating and solving models of systems to aid decision making. Topics include: introduction to systems and systems modeling; a simple what-if analysis; overview and review of linear algebra and matrices; problem formulation and model development in optimization; linear programming (LP), economic interpretation and sensitivity analysis; introduction to integer programming (IP); special linear programs; project schedule network development and computations; overview of heuristic algorithms. Uses selected software in examples, short problems and in a project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| THA | 101 | Elementary Thai I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose readings in Thai script. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| THA | 102 | Elementary Thai II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites:THA 101 with a grade of C or better |
| THA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Prerequisite: Freshman with minimum 25 hours |
| THA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| THA | 201 | Intermediate Thai I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 102 with C or better |
| THA | 202 | Intermediate Thai II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 201 with C or better |
| THA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| THA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| THE | 100 | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): non-Theatre and non-Film students only |
| THE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 201 | Film:Creat Procss I | Elements of the theatrical film: cinematography, sound, editing, directing, acting, scriptwriting, producing, and criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| THE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 320 | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: THF 220 with C or better; THE 220 with C or better |
| THE | 321 | History of the Theatre II | Traces major developments in theatre production from the 17th century to modern times. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Pre-requisites: THE 220 (or THF 220) with C or better; THE 320 with C or better |
| THE | 322 | Theatre History and Culture | Critically examines major developments in theatre history, historiography, and dramatic literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: Must NOT be a Theatre student |
| THE | 325 | Play Reading for Educational Theatre | Assigned independent readings in plays for secondary school play production. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisites: Theatre student |
| THE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 403 | Independent Film | Examines the independent film movement from the French New Wave to contemporary independent filmmakers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisites: ENG 102, 105 or 108 with C or better |
| THE | 404 | World Cinema | Films and filmmakers from Europe, Asia, Australia, the Far East, South America, and the Caribbean. Emphasizes cultural content and filmmaking philosophies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | G | Prerequisites: ENG 102, 105 or 108 with C or better |
| THE | 405 | Film: Great Performers and Directors | Examines processes and influences of one or more great film performers and/or directors. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisites: ENG102, 105 or 108 with C or better |
| THE | 406 | American Multicultural Film | Examines Native, African, Asian, and Latina and Latino American films and film artists in cinema history and production. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG102, 105 or 108 with C or better |

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| THE | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| THE | 421 | Shakespeare: Stage and Film | Examines Shakespeare's plays as written texts, stage performances, and film productions. Focuses on play reading, performance analysis, and film critique. Online course. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better |
| THE | 422 | Latina and Latino Theatre and Film | Explores issues of cultural identity through critical analysis of theatre and film by Latina and Latino artists in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better OR Theatre Masters students |
| THE | 423 | African American Theatre | Readings, discussion, video of the history and dramatic literature of African American playwrights and theatre companies in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisites: ENG 102, 105 or 108 with C or better, or Masters student |
| THE | 424 | Trends in Theatre for Youth | Surveys the history, literature, and contemporary practices in theatre for youth. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THE | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| THE | 426 | Pre-Columbian Theatre of the Americas | Selected studies in pre-Columbian theatre forms and texts of the Aztecs, Mayans, Caribbean islands, and North American Indians. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG102, 105 or 108 with C or better, or Masters Theatre student |
| THE | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| THE | 430 | History of Fashion | Fashion is rarely set but rather evolves with eras of upheaval between one generation and the next. Clothes express the personality and rank of the individual creating an instantaneous and lasting impression. Introduces over 400 years of Western fashion history drawing parallels between the fashion and the period in which it existed. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Sophomore standing or higher; Minimum GPA 2.50 |
| THE | 440 | Experimental Theatre and Performance | Explores 20th-century modernist theatrical forms and movements and development of alternative strategies for analyzing contemporary theatre and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): Theatre undergraduate student; THF 220 (THE 220) with C or better; THE 320 with C or better |
| THE | 480 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th-through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum junior standing; Credit is allowed for only THE 480 or 581 |
| THE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |
| THE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): graduate School of Film, Dance and Theatre major |
| THE | 504 | Studies in Dramatic Theory and Criticism | Surveys dramatic theory, criticism, and aesthetics as they relate to contemporary performance. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 505 | Critical Theory and Performance | Surveys contemporary theories of culture as they apply to theatre and performance studies. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre graduate student |
| THE | 510 | Studies in Literature | Assigned individual reading program in standard sources and masterpieces in theatre literature. May be repeated for credit. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite: Must be a Theatre Education or Theatre for Youth student |
| THE | 520 | Theatre History and Literature | Surveys historiographical issues and dramatic literature related to key periods in theatre history. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 524 | Advanced Studies in Theatre for Youth | In-depth study of the history, literature, and contemporary practice of theatre for young audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre Education or Theatre for Youth student |
| THE | 525 | Advanced Studies in Theatre for Youth II | Project-oriented explorations of theory and practice of contemporary theatre for youth audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THE 524 with B or better |
| THE | 562 | Literary Management Workshop | Advanced literary management for the contemporary theatre, including trends in new play development, festivals and productions throughout the United States. Participation in Arizona Playwriting Competition. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 560 with B or better |
| THE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 581 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th-through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate (degree or non-degree) student. Credit is allowed for only THE 480 or 581 |
| THE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| THE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art Theatre student |
| THE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisite: Must be a Theatre Education or Theatre for Youth student or have instructor approval. |
| THE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THE | | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| THE | | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisites: THF 220 with C or better; THE 220 with C or better |
| THE | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |

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| THE | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| THE | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THF | 101 | Acting Introduction | Introduces basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Must not be a Theatre student |
| THF | 125 | Orientation to Theatre and Film | Orientation to university and school resources and procedures. Academic success strategies, mentorship, goal setting. Community-building exercises. | N | REC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisites: School of Theatre and Film freshmen |
| THF | 126 | School of Theatre and Film: First-Year Experience | Community building within the School of Theatre of Theatre and Film; connections with faculty; foundations of creative process; attendance and written response to performance and media events. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: School of Theatre and Film major |
| THF | 160 | Introduction to Storytelling | Introduces the nature, structure, and operations of story, as well as the functions of narrative in societies and cultures. Several modules introduce a different mode of storytelling. Students learn to create their own stories utilizing several of the approaches introduced in the modules. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Film or BA Performance and Movement or BA Theatre major |
| THF | 215 | Design and Composition for Theatre and Film | Introduces the aesthetic principles and practices employed by designers/artists of the stage and screen, including: basic knowledge of the elements and principles of design; conceptualization of design for theatre and film; director/designer collaboration models; methods and modes of visual communication for theatre and film (storyboards, renderings, models, etc.). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Digital Culture (Theatre) or BA The Arts (Entertainment Design) or BA The Arts (Fashion Design) major OR School of Theatre and Film major |
| THF | 220 | Principles of Dramatic Analysis | Analysis, evaluation, and interpretation of dramatic literature for theatrical production. Emphasizes the traditional canon of dramatic literature and traditional structures and forms of drama. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: School of Theatre and Film major or Theatre Exploratory major with minimum sophomore level; ENG 101, 105 or 107 with C or better; Pre- or Co-require: THF 126 with C or better |
| THF | 397 | Professional Development Seminar | Preparatory course for senior projects. Students research and create senior project proposals while formalizing faculty mentorships. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THF | 497 | Senior Project | Mentored practicum for culminating capstone projects. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): THF 397 with C or better; Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THP | 102 | Acting I: Fundamentals | Explores and applies basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Performance and Movement or Theatre major |
| THP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 201 | Theatre Production Crew | Participation in university mainstage theatre production backstage and board operations. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THP | 202 | Acting II: Intermediate Techniques | Rehearsal techniques and application of action to dramatic text. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 101 or THP 102 with B or better; Pre or Co-requisites: THF 220 (THE 220) with C or better if completed |
| THP | 212 | Puppetry with Children | Construction and manipulation of puppets; practice in performance skills. Emphasizes educational and recreational uses of puppetry by and with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 213 | Introduction to Technical Theatre | Procedures of technical theatre production and demonstration. Topics include design and construction of scenery, lighting, and properties. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Pre-requisites: Theatre or Digital Culture (Theatre) student |
| THP | 214 | Introduction to Costuming | Basic principles of costume design, construction, and survey of selected historical periods including makeup styles. Costume design project and production experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 218 | Directing I: Introduction to Directing | Overview of emergence and practice of the director's craft. Explores director's role and responsibilities, play selection, conceptualizing, ground plans, blocking. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THF 220 with C or better; THP 102 with C or better |
| THP | 251 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 260 | Introduction to Playwriting | Basic skills of playwriting including exercises in monologues, scenes, and conflict and resolution, leading to completion of a one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: ENG101,105 or 107 with C or better |
| THP | 272 | Acting: Introduction to Movement | Movement vocabulary and physical training in relaxation, alignment, conditioning, and stage presence. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 277 | Acting: Introduction to Voice | Exercises and techniques to free the voice and improve quality and projection. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 301 | Theatre Production | Participation in university mainstage theatre productions (e.g., acting, construction, stage management). | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 213 or THP 214 with C or better |

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| THP | 302 | Acting III: Advanced Techniques | Advanced practice in methods, skills, and research for rehearsal and performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 102 or THF 101 with C or better; THP 202 with C or better; THP 272 with C or better; THP 277 with C or better; THF 220 (THE 220) with C or better |
| THP | 307 | Acting: Research and Performance | Acting in theatre projects, productions, or collaborative performances in directing classes. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisite: THF 101 (or THP 101 or THP 102) with C or better |
| THP | 311 | Creative Drama with Youth | Theories, materials, and techniques for facilitating improvisational drama with children and youth in classroom and community settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; minimum 25 hours |
| THP | 313 | Fundamentals of Design | Art and practice of scenic, costume, and lighting design for the theatre and the media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 213 or THP 214 with C or better or Digital Culture (Theatre) major |
| THP | 317 | Stage Management | Readings in stage management and participation as a stage manager in a university theatre production. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre undergraduate student; Corequisite: THP 301 |
| THP | 318 | Directing II: Intermediate Directing | Explores approaches to staging and composition. Studio work culminates in presentation of a fully rehearsed ten-minute play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP218 with C or better; THP213 or THP214 with C or better |
| THP | 322 | Acting: Voice-Overs and Radio Drama | Applies effective vocal techniques to commercials, books on tape, radio dramas. Preparation of audition tape, performance in radio drama. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 330 | Costume Design | Explores the elements of design, taking abstract ideas and formulating them into concrete forms. Encourages the student to experiment with different ideas and mediums. Emphasizes design basics, research, figure drawing, and beginning rendering techniques. Uses projects that involve complex script and character analysis to promote the student's ability to effectively communicate. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF 215 or THP 313 with C or better |
| THP | 331 | Costume Construction | Uses of materials and techniques for stage costumes with actual construction of period apparel. May be repeated for credit. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 214 with C or better |
| THP | 332 | Makeup | Practical guide to the theory and practice of theatrical makeup. Basic principles of stage makeup design and application. Develops and increases skills in the application and design of the medium through a combination of reading assignments, lecture, demonstration and supervised practice sessions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Theatre (Design and Production) major or minimum 45 hours; Credit is allowed for only THP 332 or 494 (Makeup/Advanced Makeup) |
| THP | 335 | Advanced Stagecraft | Advanced construction techniques through applicable projects in carpentry and steel fabrication for theatre production in scenery and properties. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum sophomore standing; THP 213 (or THP 301 Production) with B or better; Credit is allowed for only THP 335 or 394 (Advanced Stagecraft) |
| THP | 340 | Scene Design | Studio projects in designing scenery for contemporary stages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 213 with C or better and THE 220 with C or better, or Digital Culture (Theatre) major |
| THP | 345 | Lighting Design | Principles and theories of stage lighting design, including design process and execution, advanced exploration of design implementation and equipment; course includes drafting and drawing. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum Junior standing or Design & Production student with minimum sophomore standing |
| THP | 350 | Sound Design | Introduces the equipment, process, and recording techniques used in sound design for the theatre. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre or Film student or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 351 | Arts Management | Management, organizational behavior, and human behavior in the arts, marketing, financing, and budgeting for the arts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA The Arts major or minimum 45 hours; Credit is allowed for only THP 351 or 394 (Management and the Arts) |
| THP | 352 | Foundations of Arts Entrepreneurship | Develops entrepreneurial knowledge and skills supporting the self-actualization, self-efficacy, and market acumen of artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger BA in the Arts student; HDA 210 or 294; Creativity and Innovation in Design and the Arts with C or better or Non- majors with minimum 42 hours |
| THP | 355 | Media Design for Performance | Introduces the fundamental skills, practices and theories for media and projection design for live performance, building on traditional areas of design for the theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre and Film or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 360 | Intermediate Playwriting | Continued development of skills in playwriting through specific exercises and completion of a full-length play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre- or Co-requisite: THP 260 (with C or better if completed) or Pre-requisite: ENG 210 |
| THP | 361 | Intermediate Screenwriting | Character and dialogue development, choosing correct structure, importance of subplots, developing a story into a completed thirty-page screenplay. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THP 261 |
| THP | 372 | Acting: Advanced Movement | Movement techniques for the classical and nonrealistic theatre. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 272 with B or better; Minimum junior standing |
| THP | 377 | Acting: Voice and Speech | Introduces phonetic alphabet, exercises, and techniques for voice and speech improvement. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 277 with B or better; Minimum junior standing |
| THP | 378 | Acting: Stage Dialects | Major dialects needed for actors; techniques for researching and learning dialects; phonetic analysis of dialects. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 377 with B or better; Minimum junior standing |
| THP | 385 | Acting: Classical and Poetic Drama | Rehearsal and performance of Shakespeare and other classical playwrights. Emphasizes understanding poetic language, vocal and physical skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 (or THP 102) with B- or better; THP 277 with B- or better |
| THP | 386 | Acting: the Meisner Approach | Improvisations and exercises developed by Sanford Meisner applied to scene work. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 101 or THP 102 with B or better |
| THP | 387 | Acting: TV and Film | Professional television and film acting techniques, terminology, and on-camera experience. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre major; Theatre minor or Filmmaking Practices major; THF101 (THP 101) or THP102 with B or better, or Film and Media Production student |
| THP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 401 | Theatre Practicum | Production assignments for advanced students of technical production, stage and business management, and design. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 301 with a C or better, or Master of Arts or Master of Fine Arts student |
| THP | 406 | Advanced Scenography | Process of production collaboration among scenographers, directors, and playwrights. Taught in conjunction with THP 519. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master in Fine Arts student; THP 340 plus one of the following: THP 214, THP 313, or THP 345 with C or better |
| THP | 411 | Methods of Teaching Drama | Applies materials, techniques, and theories with grades K-8 youth. Regular participation with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 311 with A- or better or Graduate student; Credit is allowed for only THP 411 or 511 |
| THP | 418 | Directing III: Advanced Directing | Studio work building on skills learned in intermediate directing, culminating in the presentation of a fully rehearsed one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 318 with C or better or Herberger Master of Art or Master of Fine Arts student |
| THP | 420 | Acting: Solo and Collaborative Performance | Creation and development of original performance art works combining text, movement, multimedia, visual art; the actor as writer, designer, performer. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THF 101 (or THP 102) |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| THP | 428 | Theatre and the Future | Senior projects course that includes a culminating creative synthesis of student's knowledge. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THP 201 or THP 301 with C or better; THE 440 with C or better |
| THP | 431 | Advanced Costume Construction | Specialized training in costume construction problems and crafts with projects in tailoring, millinery, and period accessories. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre Design & Production or Digital Culture (Theatre) students; THP 214 and 331with C or better or Theatre Performance Design student. |
| THP | 435 | Technical Direction | Seminar in fundamental principles and practices of technical directors as managers, engineers and artisans in theatre production. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum junior standing; THP 213 and 301 (Theatrical Construction) OR THP 301 (Production) with B or better; Credit is allowed for only THP 435 or 494 (Technical Direction) |
| THP | 440 | Advanced Scene Design | Advanced studio projects in designing scenery for a variety of stage forms. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or must be a Theatre Scenography or Performance Design student |
| THP | 441 | Scene Painting | Studio projects in painting stage scenery. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or Theatre Scenography or Performance Design student |
| THP | 442 | Drawing | Techniques in drawing and rendering for scenic, costume, and lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 444 | Drafting for the Stage | Fundamentals of and practice in graphic techniques for the stage. Introduces computer-aided design for the stage. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 213 with C or better, or Theatre Performance Design or Digital Culture (Theatre) student |
| THP | 445 | Advanced Lighting Design | Specialized techniques in stage lighting. Advanced application of design process, graphic techniques of design presentation, and use of qualities of light. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP345 C or better, or Theatre Scenography or Performance Design student AND THP444 with B or better |
| THP | 448 | AutoCAD for Live Entertainment | Comprehension and practice of two-dimensional drafting techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THP 215 or THP 313 with C or better or Theatre Design and Production major; Credit is allowed for only THP 448 or 494 (AUTOCAD) |
| THP | 449 | AutoCAD 3D for Live Entertainment | Comprehension and practice of 3D drafting and rendering techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THP 448 with C or better; Credit is allowed for only THP 449 or 494 (AutoCAD 3D) |
| THP | 450 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Herberger Institute for Design and the Arts student |
| THP | 451 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite:THP 450 |
| THP | 452 | Arts Entrepreneurship Seminar | Challenges students to learn how individuals have used their creative skills to create new arts business models. Case studies examine how creativity can spur new opportunities in the arts industry. Students complete their own project proposals. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 352 with C or better |
| THP | 455 | Advanced Media Design | Explores advanced skills, practices and theories for media and projection design for live performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Dance, Film or Theatre major; THP 355 with C or better; Credit is allowed for only THP 455 or THP 494 (Advanced Media Design) |
| THP | 457 | Digital Portfolio | Cross-disciplinary exploration of methods, technologies and aesthetics of portfolio presentation for professional designers and artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): The Arts (Fashion Design) or Theatre (Design and Production) major; minimum 56 hours. Credit is allowed for only THP 457 or 494 (Digital Portfolio) |
| THP | 460 | Advanced Playwriting | Practice and study of creating characters, dialogue, scenes, plays, and monologues for the stage, culminating in a full-length script. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Fine Arts BFA student; THP 360 with C or better |
| THP | 461 | Scripts in Progress | Studio work with the instructor, centered on revisions of original plays. | N | IND | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 460 with C or better |
| THP | 482 | Theatre for Social Change | Interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisite: Minimum sophomore standing |
| THP | 483 | Acting: Viewpoints and Composition | Training in Anne Bogart's viewpoints and composition techniques; application to rehearsal and performance, and creating new work. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 202 with C or better (or BA Performance and Movement major), junior standing or higher or MFA major |
| THP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Theatre or Film student |
| THP | 489 | Acting: Audition Techniques and Career Development | Familiarization with the business of performance; preparation and techniques for auditioning; self-promotion and marketing strategies; grant resources, interviews, and unions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 102 or THF 101 with B or better; THF 220 (THE 220) with B or better; minimum junior standing |
| THP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| THP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| THP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | Prerequisites: Theatre Design & Production student |
| THP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 501 | Performance: Solo Performance | Students begin to define their mission in art. Emphasizes the actor as a solo storyteller, speaking as herself or himself. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-8 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student |
| THP | 504 | Acting: Styles | Fundamentals including combat, scansion, poetic language, acting style. Scene study, ensemble performance projects focused on Shakespeare, new scripts. May be repeated for credit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-8 | | Pre-requisite: THP 503 |
| THP | 505 | Graduate Colloquium | Orientation to graduate study of theatrical practice; cohort development, introduction to the advanced literature and media in the art form. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Master of Fine Art Theatre student |

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| THP | 506 | Design Collaboration | Process of production collaboration. Taught in conjunction with THP 519. May be repeated for credit. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student |
| THP | 507 | Acting: Advanced Research and Performance | Acting in advanced theatre projects, productions, or collaborative performance in directing classes. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisites: Master in Arts, Master in Fine Arts or PHD Theatre student |
| THP | 511 | Methods of Teaching Drama | Applies dramatic materials, techniques, and theories with grades K-8 youth. Regular participation with children. Credit is allowed for only THP 511 or 411. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 512 | Puppetry Workshop | Surveys puppetry in education, puppetry as an art form in design and performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student |
| THP | 513 | Touring Theatre | Provides an understanding of the theories and aesthetics of touring theatre and a practice in its conceptualization, creation, administration, and production. Examines a variety of styles and methods of creating "movable" theatrical material, focusing on forms that require minimal scenic and design support. Focuses on process and working toward a quality product. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Fine Arts Graduate student; Credit is allowed for only THP 513 or 598 (Touring Theatre) |
| THP | 514 | Projects in Community-Based Theatre | Theories and techniques of improvisational theatre with emphasis on youth. Stresses professional development through projects combining research, theory, and practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: Master in Arts, Master in Fine Arts or PHD Theatre major |
| THP | 517 | Stage Management | Advanced study of the principles and practices of stage management in the professional theatre. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 518 | Advanced Directing Lab | Active discovery of directing concepts through practical exercises and collaboration; deconstruction of contemporary/classic literature. Explores director as primary artist. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 519 | Directing: Works in Progress | Advanced projects in directing concentrating on a collaborative process among director, playwright, actors, and designers. Focuses primarily on new scripts or adaptations of literature. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 520 | Directing the New Play | Advanced methods and studies in directing, focusing on new play development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 521 | Performance I: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination; emphasizes physical diagnostics and development. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 522 | Performance I: Acting and Voice | Advanced studio work in the performer's voice; emphasizes physical awareness, vocal anatomy, training, and interpretation of texts. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 523 | Performance II: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 524 | Performance II: Acting and Voice | Advanced studio work in the performer's voice. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 525 | Design I: Conceptualization and Collaboration | Conceptual structures of the design process in theatre; development of creativity, flexibility, and communication in the collaborative process. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 526 | Design I: Drawing and Rendering | Development of drawing and rendering skills, techniques, and evaluation in the presentation, realization, and communication of performance design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 527 | Design II: Conceptualization and Collaboration | Offers students the chance to develop advanced skills in creating fully realized design ideas, particularly in working with new and experimental forms. Through the coursework, readings, and projects, students develop new methods and systems of thought for dealing with challenging dramatic works. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Master of Fine Arts Theatre major |
| THP | 528 | Design II: Visualization and Presentation | Advanced skills and techniques in rendering, visualizing and presenting design ideas and materials for performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 529 | Viewpoints and Composition | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 530 | Advanced Costume Design | Advanced studio projects in costume design for a variety of production forms. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Art or Master of Fine Arts Theatre student |
| THP | 540 | Scene Design Applications | Conceptual and practical application of the design process including graphic and sculptural projects. Practical design problems investigated in a lab. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Art or Master of Fine Art Theatre student |
| THP | 545 | Lighting Design Applications | Advanced studio projects in stage lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 550 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Theatre student |
| THP | 551 | Arts Management | Advanced study of the principles and practices of arts management in the nonprofit and for-profit sectors. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 552 | Arts Entrepreneurship | Project-based course in new venture creation for the arts. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 555 | Media Design Applications | Advanced applications for skills and practices in media design for live performance, including content creation, systems design, and playback. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 556 | Performance Technology | Examines issues surrounding the integration of live performance and digital media. Students study the work of contemporary practitioners and theorists and experiment with creating their own works of digital art. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate Theatre major |
| THP | 557 | The Digital Portfolio | Crossdisciplinary exploration of methods, technologies, and aesthetics for portfolio presentation for professional designers and artists. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| THP | 560 | Dramatic Writer's Workshop | Practice and study of creating characters, dialogue, scenes, plays, and monologues for the stage. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre Master of Arts or Master of Fine Arts student |
| THP | 561 | Scripts in Progress | Studio work with the instructor centered on revisions of original plays. | N | IND | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |

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| THP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 582 | Theatre for Social Change | Advanced, interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate or Doctoral student |
| THP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Theatre student |
| THP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre Master of Arts or Master of Fine Arts student |
| THP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Fine Arts Graduate student |
| THP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): Fine Arts graduate student |
| THP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art or Dramatic Writing Theatre student |
| THP | 611 | Research in Drama Education | Current research practices in drama education. Development and execution of research projects in ethnographic and arts-based models. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 618 | Theatre for Youth Practicum | Practical experience in theatre for youth projects: improvisation, education, production. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2-3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 649 | Design Studio | Projects include design of scenery, costume, lighting, or sound for lab or mainstage productions. | N | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Fine Arts or PhD Theatre student |
| THP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| TMC | 110 | Understanding the Enterprise | Introduces essential functions required in technology-based and innovative enterprises and viewed in the context of their relationship to each other; examines the enterprise's role in society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only TMC 110 or TEM 194 (Introduction to Technology Development) |
| TMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 300 | Career Management | Provides professional program business administration students with information on ASU business-related courses, business careers, interviewing, job hunting, and résumé skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): minimum 56 hours |
| TMC | 310 | Promotion of the Enterprise | Building and maintaining customers with an emphasis on developing a market identity and sales for technology-based and innovative enterprises. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110 OR minimum 56 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TMC | 320 | Funding the Enterprise | Focuses on financial resource management techniques utilized by U.S. domestic companies and covers the unique aspects of revenue accounting and its application to company operations. Concepts covered include: data capture of requisite information from various computer systems; determination of revenues generated from sales of products and services to customers; in-depth analysis of operational expenses; preparation of accounting and financial data; monthly accounting requirements; account reconciliation; monthly/quarterly/annual reporting; development and analysis of financial reports and billing. Emphasizes accounting, planning and valuation concerns, as well as financial trends and industry prospects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 110 or TEM 194 (Introduction to Technology Development) |
| TMC | 330 | Leading the Enterprise | Essential practices for managers, including planning, organizing, leading and controlling the enterprise. Studies current issues affecting managers such as sustainability, environmental protection, work groups, globalization, technology management, entrepreneurship, diversity and continuous improvement. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Minimum junior standing |
| TMC | 331 | Quality Assurance | Instrumentation and methodologies for materials testing and quality control in various manufacturing processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre- or corequisite(s): ABS 350 (or AGB 360, ECN 221, EGR 280, PSY 230, STP 420, STS 401 or TEM 420); TMC 330 (or TMC 346) |
| TMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 396 | Professional Orientation | Senior advising, industry presentations, and career counseling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum junior standing; Credit is allowed for only TMC 396 or GIT 396 |
| TMC | 410 | Enterprise Operations | Emphasizes basic principles of enterprise operations management, including productivity, strategic management, global environment, forecasting, capacity planning, new technologies, location and layout strategies, supply-chain management, inventory control and scheduling. Uses common decision-making issues and related qualitative and quantitative techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 |
| TMC | 430 | Enterprise Strategy and Innovation | Enterprise strategic plan development and implementation, concepts of open innovation; vision, mission, steps of strategic plan development; strategic goals, objectives, tasks, schedule, resource considerations; organization's strengths and weaknesses; environmental opportunities and threats; strategy implementation, impact assessment and refinement, organizational- and management considerations, theory and practice of open innovation. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330; Credit is allowed for only OMT 494, Strategic Planng/Mgt or TMC 430 |
| TMC | 470 | Enterprise Planning and Implementation | Investigates and tests tools and techniques for effective design and management of enterprise projects and programs using computer applications. Develops and demonstrates teambuilding and leadership skills in course projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 OR W.P. Carey BA Technology major with MGT 300. Credit is allowed for only OMT 570 or TMC 470 |
| TMC | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only ETM 480, GIT 480 or TMC 480 |
| TMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | Prerequisites:Fulton Polytechnic School undergraduate or graduate student AND have a 2.25 GPA or better |
| TMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum 3.00 GPA |
| TMC | 555 | Leadership and Teams | Evaluates and discusses the latest research in leadership and teams in terms of accomplishing set goals efficiently and effectively both within large organizations and smaller groups. Addresses management and leadership styles and concepts such as team cognition and team situational awareness. Seminar-style course with a large amount of reading, discussion, synthesis and application of current research. Field trips to local airline operations and high-operations tempo organizations accompany the readings and in-class discussions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |

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| TMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | | Leading the Enterprise | Essential practices for managers, including planning, organizing, leading and controlling the enterprise. Studies current issues affecting managers such as sustainability, environmental protection, work groups, globalization, technology management, entrepreneurship, diversity and continuous improvement. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Minimum junior standing |
| TMC | | Quality Assurance | Instrumentation and methodologies for materials testing and quality control in various manufacturing processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre- or corequisite(s): ABS 350 (or AGB 360, ECN 221, EGR 280, PSY 230, STP 420, STS 401 or TEM 420); TMC 330 (or TMC 346) |
| TSS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 501 | A Deep History of the United States/Mexico Borderlands I | Using a comparative and relational approach, the seminar explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from pre-contact times to the Mexican American War. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 502 | A Deep History of the United States/Mexico Borderlands II | Using a comparative and relational approach, explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from the Mexican American War to the recent past. Centers on comparative economic growth and development of Mexico and the United States, the impact of unequal development on the border region and its people, and the development of a transnational society in the U.S./Mexico borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 503 | Epistemologies and Transborder Thought | Examines different approaches to the production and critique of knowledge relevant to transborder social, political, economic, cultural, and institutional structures and processes. The complexity of these structures and processes require transdisciplinary methods of inquiry that go beyond a single set of disciplinary assumptions. Explores the transdisciplinary articulation of theory and method, and considers the strengths and limitations of various approaches and critiques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 504 | Tools for Transborder Research | Focuses on the selection of methods appropriate for transborder research. Considers the pitfalls of conducting monodisciplinary research in a stratified, differentiated and multicultural world; the most robust methods used in various approaches; the main methodological obstacles to transdisciplinary research; and the challenges of using mixed methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 505 | Theories and Methods of Migration, Health & Applied Social Policy in a Transborder Context | Divided conceptually in three broad analytical areas: (1) migration with an emphasis on demography, (2) health with an emphasis on epidemiology, and (3) public policy analysis. Provides basic training in the application and interpretation of quantitative and qualitative methods and techniques commonly used in researching these areas. Applies these techniques to issues that are specific to the reality of transborder and/or transnational contexts. Students are required to apply and present an analysis in their field of interest which demonstrates their grasp of theory and method. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 506 | Theory and Methods of Transborder Media and Expressive Culture | Overview of the interdisciplinary theories and methods employed to research and analyze media and creative cultural production. Objects of analysis include literature, film, live performance, theater, Web-based media, popular culture production, and visual arts. Required readings elucidate strengths, limitations, and applicability of particular theories and methods to different types of creative expression and media production as well as to their historical and political contexts. Students engage with, critique, and contribute to the theories and methods presented in the course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 507 | Theory and Methods of Transborder Cultural Acquisition, Language Development, and Learning | This course familiarizes graduate students with literature on relationship between culture, language, and learning, and their theoretical and methodological underpinnings within a transborder context. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TSS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 601 | Internship in Transborder Studies | Academic internship helps students become full participants in globalized, transnational contexts through a combination of practical experiences in community organizations, readings about transnational life in globalized contexts, reflection, and discussion. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 607 | Colloquium in Transborder Studies | Provide students the opportunity to present their skills, learning, research, and topical interests before an open forum of faculty and students at the beginning of their third year and prior to their dissertation research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 608 | Transmitting Transborder Studies to Publics and Institutions | Provides students with the most recent advancements in presenting theory, methods, and techniques in transborder analysis and application. Designed to enter multiple audiences in public, professional, academic, and school settings, course takes advantage of the latest developments in multimedia, print, and electronic technology, film, and print in order to provide systematic and detailed learning opportunities. Provides the basis of developing capacities to create and develop learning modules, and programs on issues of transborder political ecology, economic transformations, cultural development and emergence, literary constructions and projections, and issues of identity, class, and gender. Course is conducted bilingually and makes use of Spanish- and English-language resources. For this reason, it is advisable, but not required, that students are at least conversationally proficient with Spanish and English. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 609 | Prospectus Design in Transborder Studies | Provides doctoral students with the necessary tools to prepare a research proposal that could be submitted as a dissertation prospectus or to a funding agency. Students bring a well-formulated idea of the kind of research they wish to pursue for their dissertation. They also bring a clear idea of the relevant concepts, literature and methods, required to complete the proposal. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 611 | Comparative and Transborder Perspectives on Learning | This small class emphasizes discussion, presentations by students, and written research papers. Surveys theoretical and methodological aspects related to the use of comparative and transborder perspectives to the study of education. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 612 | The Political Culture of Learning & Change in Transborder Context | Examines a variety of development and learning issues confronting linguistically and culturally diverse groups with an emphasis on immigrant children and families. Includes such topics as: (1) Theoretical foundations and their related impact on organizing interventions for learning and socialization. (2) The intersection of the development of language, culture, and learning in context of linguistic diversity and immigration. (3) The influence and impact of public policy on language minority groups of immigrant backgrounds. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 614 | Bilingualism in Diverse Acquisition and Practicing Contexts | Examines bilingualism, language in society, and languages in contact in transborder contexts and bilingual schooling. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): PhD student |
| TSS | 615 | Dialectical Inquiry in Transborder Contexts | Introduces the application of dialectical inquiry in value-relevant grounded research methods as a complementary approach to value-free scientific inquiry into practical problems in transborder cultural acquisition, language development, and learning. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TSS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 200 | Impact of Communications Technology on Society | Organizational issues and development of technical communication. Activities include research, evaluations, and presentation of oral arguments in support of positions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| TWC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 301 | General Principles of Multimedia Writing | Introduces writing in a variety of media, understanding the consequences of integrating media, and effective editing techniques. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 347 | Written Communication for Managers | Introduces strategies, formats, and techniques of presenting information to business and other workplace audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 361 | Writing for Health Care Management | Strategies, formats, and techniques for effective writing and presentation of information for nursing professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better; RN-BSN student. Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 362 | Writing in Health Professions | Focuses on effective communication practices in health-related fields, emphasizing communicating professionally with both scholarly and workplace audiences. In addition to providing a foundation in workplace communication, emphasizes information and technology literacy to help students become proficient in collecting, analyzing, interpreting and synthesizing information using appropriate tools, sources and styles. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Medical Studies major or Nursing and Health Innovation student. Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 400 | Technical Communications | Planning and preparing technical publications and oral presentations based on directed library research related to current technical topics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: College of Technology and Innovation BS or BSE student; senior academic level; 2.25 minimum cumulative GPA; ENG 102, 105 or 108 with C or better |
| TWC | 401 | Principles of Technical Communication | Basic information design principles to produce effective written, oral, and electronic technical communication. Understanding of rhetorical and audience analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 401 or 501 |
| TWC | 403 | Writing for Professional Publication | Analyzes the market and examines the publication process, including the roles of the author, editor, and reviewer. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 411 | Principles of Visual Communication | Basic principles of visual communication in print and electronic media. Understanding graphic and document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 411 or 511 |
| TWC | 414 | Visualizing Information | Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TWC 414, 494 (Visualizing Information), 494 (Information Visualization) 514, 598 (Visualizing Information) or 598 (Information Visualization) |
| TWC | 421 | Principles of Writing with Technology | Understanding historical and social impact of technology on writing, with emphasis on multimedia design, computer-mediated communication, and hypertext. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 421 or 521 |
| TWC | 431 | Principles of Technical Editing | Basic principles of technical editing (for print and electronic media) including copyediting, reviews, standards, style, and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 431 or 531 |
| TWC | 443 | Proposal Writing | Develops persuasive strategies and themes for researching and writing professional proposals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 443 or 543 |
| TWC | 444 | Manual and Instructional Writing | Design and development of a user manual, writing instructions, improving graphics and page design, and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 444 or 544 |
| TWC | 445 | Computer Documentation | Introduces writing documentation for the computer industry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 445 or 545 |
| TWC | 446 | Technical and Scientific Reports | Introduces strategies, formats, and techniques of presenting information to technical and scientific audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 446 or 546 |
| TWC | 451 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws, with emphasis on electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 451 or 551 |
| TWC | 452 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 452 or 552 |
| TWC | 453 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 453 or 553 |

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| TWC | 454 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 454 or 554 |
| TWC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 490 | Capstone | Development of a professional portfolio, creation of a culminating document, and synthesis of undergraduate experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| TWC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TWC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| TWC | 501 | Principles of Technical Communication | Basic information design principles to produce effective written, oral, and electronic technical communication. Understanding of rhetorical and audience analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 401 or 501 |
| TWC | 503 | Writing for Professional Publication | Analyzes the market and examines the publication process, including the roles of the author, editor, and reviewer. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| TWC | 504 | Applied Rhetoric and Technical Communication | Foundation in applied and technical communication. Covers the emergence and development of technical communication as a profession and field; rhetorical concepts and their application to technical and applied communication, ethical issues; and the impact of internationalization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |
| TWC | 505 | Research in Technical and Applied Communication | Explores the research process and methods appropriate for technical and professional communication. Provides a foundation for understanding the research process; designing and planning valid research within the context of technical and professional communication; collecting and interpreting information, ethical issues related to research; and reporting results. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |
| TWC | 511 | Principles of Visual Communication | Basic principles of visual communication in print and electronic media. Understanding graphic and document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 411 or 511 |
| TWC | 514 | Visualizing Information | Covers how to process data and information in ways that help discover what's important about the information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TWC 414, 494 (Visualizing Information), 494 (Information Visualization) 514, 598 (Visualizing Information) or 598 (Information Visualization) |
| TWC | 521 | Principles of Writing with Technology | Understanding historical and social impact of technology on writing, with emphasis on multimedia design, computer-mediated communication, and hypertext. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 421 or 521 |
| TWC | 531 | Principles of Technical Editing | Basic principles of technical editing for print and electronic media, including copyediting, reviews, standards, style, and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree or non-degree seeking); Credit is allowed for only TWC 431 or 531 |
| TWC | 543 | Proposal Writing | Develops persuasive strategies and themes for researching and writing professional proposals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 443 or 543 |
| TWC | 544 | Manual and Instructional Writing | Design and development of a user manual, writing instructions, improving graphics and page design, and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 444 or 544 |
| TWC | 545 | Computer Documentation | Introduces writing documentation for the computer industry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 445 or 545 |
| TWC | 546 | Technical and Scientific Reports | Introduces strategies, formats, and techniques of presenting information to technical and scientific audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 446 or 546 |
| TWC | 547 | Business Reports | Introduces strategies, formats, and techniques of presenting information to business and other workplace audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| TWC | 551 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws; emphasizes electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 451 or 551 |
| TWC | 552 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 452 or 552 |
| TWC | 553 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 453 or 553 |
| TWC | 554 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 454 or 554 |
| TWC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|----------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| TWC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | |
| TWC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| UET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 305 | Introduction to Microelectronics | Quantifies the role of microelectronics technology and its associated skills as drivers for electronics systems development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Academic Level greater than or equal to Junior |
| UET | 331 | Electronic Materials | Physical, chemical, electromagnetic, and mechanical properties of electronic materials. Solid-state device characteristics and their material properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210, CHM 113, PHY 112 OR Applied Science (Electronic Energy Systems) BAS student |
| UET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 411 | Layer Deposition Technology | Fundamentals, applications, and vacuum technology of layer deposition processes used in IC fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit for UET 411 or 511 |
| UET | 415 | Electronic Manufacturing Engineering Principles | Electronic equipment design and fabrication principles and practice. Completion of electronics hardware design project and report. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2-3 | | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 416 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit is allowed for only UET 416 or 516 |
| UET | 417 | Semiconductor Technology Practice | Lab-based design and execution of safe and effective semiconductor fabrication operations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331 |
| UET | 418 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331; Credit is allowed for only UET 418 or 518 |
| UET | 424 | Pattern Transfer Technology | Maskmaking, lithography, and etch processes for integrated circuit fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331; Credit allowed for only UET 424 or 524 |
| UET | 426 | Software Tools for the Semiconductor Industry | Introduces software tools commonly used in the semiconductor industry, such as SUPREM IV, PSPICE, VIEWLOGIC, and ICED. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| UET | 432 | Semiconductor Packaging and Heat Transfer | Packaging theory and techniques; hermetic and plastic assembly; thermal management; electrical characteristics and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331. Credit is allowed for only UET 432 or 532 |
| UET | 437 | Process Control and Validation | Statistical process control and its application to IC fabrication. Design, control, and performance validation techniques throughout the manufacturing process. Lecture with Web support. Prerequisite: 300-level statistics course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre/Co-requisite: UET 417 with C or better or Co-enrolled in UET 417 |
| UET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| UET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| UET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| UET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 511 | Layer Deposition Technology | Fundamentals, applications, and vacuum technology of layer deposition processes used in IC fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 411 or 511 |

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| UET | 516 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate status. Credit is allowed for only UET 416 or 516 |
| UET | 518 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 418 or 518 |
| UET | 521 | Device Physics | Band structure of solids, electron hole-pairs, mobility, lifetime, fermilevel, pn junctions, diodes, and bipolar and MOS transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 524 | Pattern Transfer Technology | Maskmaking, lithography, and etch processes for integrated circuit fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 424 or 524 |
| UET | 532 | IC Packaging | IC packaging theory and techniques; assembly techniques, material issues, thermal management, electrical performance and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 432 or 532 |
| UET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) with a 3.0 GPA or better OR be a Fulton Polytechnic School senior with a 3.0 GPA or better |
| UET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UNI | 101 | Student Success Seminar | Understanding human diversity, perspectives, and values as they relate to student success. Orientation to ASU resources, study skills, and academic and social issues for students. Seminar, discussion. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 110 | Critical Reading and Thinking | Prepares students to be successful in college-level academics and helps them improve their critical reading and critical thinking skills. | N | LEC | N | OPT | University College | Dean, University College | 3 | | |
| UNI | 120 | Academic Success | Assists students in creating strategies for success in their academic lives. Students explore personal and academic strengths and barriers that impact success. Identify and utilize university resources available to support success at ASU, acquire and enhance academic skills necessary for success in the university, and discover ways to stay on course to meet academic goals. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only UNI 120, 194 (Academic Success: Residential) or 194 (Academic Success: Off-Campus) |
| UNI | 150 | Major and Career Exploration | Concepts and skills in the process of selecting a major: self-assessment, research, interviewing, and decision making. Exploration of ASU opportunities and investigation of career options. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | University College | Dean, University College | 1-4 | | |
| UNI | 220 | Academic Refresher | Assists students who find themselves in academic trouble (failed courses, academic probations, disqualification). Students explore the barriers that may be keeping them from reaching their academic goals and acquire tools to overcome those challenges. Topics include self management, self assessment, lifelong learning, and interdependence. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only UNI 220 or 294 (Academic Refresher) |
| UNI | 250 | Choosing a Major | Advanced, one-hour career development course helps students make a thoughtful selection of major and consider the career direction that fits best for them. Students complete advanced assessments of interests, personality, and values; investigate relevant majors and careers, including connecting with working professionals; learn effective decision-making strategies; identify barriers and resources; and make connections to new major department. | N | SEM | Y | OPT | University College | Dean, University College | 1 | | Pre-requisites: UNI 150 Career Exploration with a C or better |

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| UNI | 270 | Career Direction for a Successful Future | Actively engages students in their educational and career-planning process by exploring factors that influence personal decision making and planning for the future. Students examine their strengths and personal narrative, identify decision making factors, research career development and a particular career, and develop teamwork skills for the workplace. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Pre-requisite: UNI 250 with C or better; Credit is allowed for only UNI 270 or 294 (Next Steps in Career & Major Exploration) |
| UNI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| UNI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | Prerequisite(s): minimum 45 hours |
| UNI | 400 | Society and the Individual | Various social institutions, how they shape the socialization process of a group and individual and give a community meaning, values and a set of norms. Focuses on Arizona as a case study for student research inquiries. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: Bachelor of General Studies major; Minimum 2.00 GPA; Minimum 30 hours; Credit is allowed for only UNI 400 or COM 494 (Society and the Individual) |
| UNI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | University College | Dean, University College | 1-12 | | |
| UNI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| UNI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | University College | Dean, University College | 1-4 | | |
| UNI | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| URB | 100 | Introduction to Urban and Metropolitan Studies | Introduction to study of urban governance. Explores city, civil society, and urban form from different cultures and historical periods. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | C | Credit is allowed for only URB 100 or 300 |
| URB | 105 | Introduction to Urban Governance | Introduces American city growth from past to present. Examines the background of major urban issues emphasizing governance, management, and policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Credit is allowed for only URB 105 or 305 |
| URB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 220 | Introduction to Urban America | Investigates traditional and evolving forms of civic engagement and management. Examines leadership and organizational models to urban development and decision making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 240 | Urban Policy | Examines major theories about the purposes and processes of urban policy formulation, adoption, and implementation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | C | |
| URB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 300 | Urban and Metropolitan Studies | Examines the city using a multidisciplinary approach drawing from different historical, cultural, social, philosophical, and economic issues and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Credit is allowed for only URB 100 or 300 |
| URB | 301 | Urban Research | Introduces the philosophy, scope, and methods of urban affairs research. Includes an overview of quantitative and qualitative methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 302 | Urban Theory | Examines the sociological, economic, and political theoretical positions underlying the development and evolution of metropolitan areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 305 | Urban Governance | Examines major shifts and trends in urban America. Concentrates on the changing approaches to governance and policies of urban areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Credit for URB 105 or 305 |
| URB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 400 | Senior Professional Seminar | Demonstrates completion of the urban studies program by synthesizing and applying core knowledge, skills, and abilities to significant urban issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 405 | Citizen Engagement and Community Building | Develops a conceptual, critical, and practical understanding of urban dwellers' involvement in community affairs as citizens and as builders of vital neighborhoods and vibrant cities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 30 hours |
| URB | 406 | Public Administration & Community Development | Critically examines the concepts community and development and considers how important forces such as diversity, civic life, changes in social space, and globalization, affect our understandings about these concepts and influence our actions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 30 hours |
| URB | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: minimum 30 hours; Credit is allowed for only URB 410 or PAF 410 |
| URB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| URB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| URB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| USL | 210 | Service Learning: Intro to Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustices affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions, and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship, and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | |
| USL | 216 | Service Learning: For Educators | Examines the effects of social justice issues on student achievement. Correlates academic coursework with required community service to analyze community needs, the importance of civic engagement and community issues affecting ethnic minorities and marginalized populations in contemporary American society, particularly how it applies to our education system. Students dedicate a minimum of 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services) directly serving high-needs youth or adults. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and social injustices, and how to utilize this knowledge in the teaching profession to better serve all students. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisite: Mary Lou Fulton Teachers College major |
| USL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| USL | 402 | Service Learning: Education & Youth | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement, and an in-depth study of the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society as they apply to education in Arizona and the United States (policy, student achievement, teacher and administration effectiveness and parental involvement). Students dedicate 100 service hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies), directly serving high-needs youth. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and the importance of civic engagement particularly how it applies to the education system. Provides real-world experiences that exercise advanced academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 hours |
| USL | 410 | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |
| USL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| USL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| USL | 496 | Service Learning Capstone | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Applies theory from service learning pedagogy and educational studies to real-world application and academic success. Provides field experience for students to exercise academic knowledge and skills applicable to career experience and program studies. Students must (a) successfully assess a community need in education that correlates to current research and (b) collectively plan a sustainable service project that benefits high-needs children. The student-directed service project addresses social justice issues in education related to corresponding research. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 or 216 |
| USL | 497 | Service Learning Capstone Project | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Implements a sustainable service project addressing social justice issues in education. Student-directed project corresponds to research and planning completed during the previous semester. Provides field experiences for students to implement academic knowledge and skills acquired through the Educational Studies program and to create realistic solutions to national and local community issues that impact student achievement. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 (216), 410 and 496 |
| USL | | Service Learning: Education & Youth | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement, and an in-depth study of the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society as they apply to education in Arizona and the United States (policy, student achievement, teacher and administration effectiveness and parental involvement). Students dedicate 100 service hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies), directly serving high-needs youth. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and the importance of civic engagement particularly how it applies to the education system. Provides real-world experiences that exercise advanced academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 hours |
| USL | | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |
| USL | | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |

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| USL | | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustices affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |
| VTN | 101 | Elementary Vietnamese I | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| VTN | 102 | Elementary Vietnamese II | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:VTN 101 with C or better |
| VTN | 201 | Intermediate Vietnamese I | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 102 with C or better |
| VTN | 202 | Intermediate Vietnamese II | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 201 with C or better |
| VTN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 321 | Advanced Vietnamese and Literature I | Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite : VTN 202 |
| VTN | 322 | Advanced Vietnamese and Literature II | Continuation of VTN 321. Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite: VTN 321 |
| VTN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83IBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| WAC | | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83IBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83IBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Department of English | 1-4 | | |
| WPC | 101 | Student Success in Business | Introduces students to resources that help them to succeed in the W. P. Carey School of Business. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |

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| WPC | 196 | WPC Domestic Exchange Placeholder | Reserved for undergraduate participants in a W.P. Carey Domestic Exchange program. This placeholder course remains on the student's academic record until the student's record is updated by WPC following the completion of the student's domestic exchange program. This course is then dropped and replaced with the ASU course(s), credit(s), and grade(s) equivalent to the coursework completed during the domestic exchange program. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete during the domestic exchange program. Acceptance to an WPC Domestic Exchange program is required. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-18 | | |
| WPC | 201 | Business Student Development | Introductory business course for students transferring into the W. P. Carey School of Business. Focuses on ASU resources and developing professionalism. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 1 | | Prerequisite(s): WPC major with 15-44 earned hours. Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WPC | 301 | Business Forum | Provides professional program business students with information on careers, interviewing, job hunting, and résumé skills. Must be taken in the first semester of the professional program for business students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Pre-requisites: Must be a W.P. Carey degree program business student |
| WPC | 302 | Honors Professional Development | Provides a foundation for developing key professional knowledge and skills required for future business and personal success. Strategic thinking and design, scenario development, verbal and written persuasion, direct marketing techniques, systems thinking, relationship development, research design, and decision-making models. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | |
| WPC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Pre-requisites: Must have a minimum GPA of 2.00; Must have a minimum total earned hours of 56 |
| WPC | 480 | W. P. Carey Capstone Course | Develops a general manager's or business owner's perspective on how organizations can create value. Creating long-run value by repeatedly producing goods and services that customers will buy at prices that cover the costs of producing them is the key to success for business organizations. Analyzing current and future environments to understand threats and opportunities in various institutional settings around the world is the starting point for thinking about how an organization might create value and gain sustainable competitive advantage. Evaluates the impact of institutional settings in different countries and ethical values on decision making. Students learn how to successfully manage relations with key stakeholders including customers, employees, suppliers of capital as well as other component goods and services, and stakeholders from various levels of government in different countries. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 3 | L | Pre-requisites: W. P. Carey B.S. student, senior standing, and all W. P. Carey business core courses: WPC 301 or 302; LES 305, FIN 300 or 302 or 303, MKT 300 or 302 or 303, MGT 300 or 303, SCM 300 or 303, and international bus course, all with C or better |
| WPC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-12 | | |
| WPC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WPC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Pre-requisites: Must be W. P. Carey BS or BA degree program student, junior or senior standing. |
| WPC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-3 | | |
| WPC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-12 | | |
| WPC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| WST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 220 | Gender, Media and Culture | Introduction to gender and the media including magazines, films, advertising, new media, and other popular culture forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | |

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| WST | 235 | Disability, Justice & Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | |
| WST | 270 | Global Perspectives on Women | Through lectures, creative class activities and discussions, presents a comprehensive overview of gender and globalization with special emphasis on lived realities of women worldwide. Understands women's lives and gendered experiences through the issues of work, identities (nationality, race, class, age, ability), bodies and embodiment, belief systems, political economy and difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only WST 270 or 294 (Global Perspective on Women) |
| WST | 276 | Wave on Wave: Survey of U.S. Women's Movements | Historical survey of sources influential in the development of the feminist movement in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| WST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| WST | 313 | Women and Sexuality | Critical analysis of the social context of women's sexuality including such topics as medicalization, racialization, media and popular culture, social justice and policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 318 | African and African Diaspora Women Writers | An in-depth study of themes such as race, class, gender, and ethnicity in the creative fiction of black women writers of African descent in the United States, the Caribbean, and Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| WST | 330 | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | 331 | Asian Pacific American Genders and Sexualities | Explores gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only APA 330 or WST 331 |
| WST | 333 | Critical Perspectives on Sexuality | Examines critical theories of sexuality, including history, commerce, pleasure, LGBT issues, identity, medicalization of sexuality, disorders, sex crime, and pornography. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 340 | Gender, Science, and Technology | In-depth examination of the complex interrelationships of gender, science, technology, and society in a number of different contexts. Looks at the participation of women in scientific and technical fields both historically and cross-culturally, and addresses such topics as: gender segregation by status and discipline, feminist theories of gender and science, the conditions under which women have succeeded in the sciences, gender and biological determinism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 345 | Gender, Religion, and Global Violence | In-depth study of forms of gendered violence in which religion plays a key role in either the practice or perpetuation of that form of violence in a myriad of cultures and contexts. Analyzes current responses and proposes new approaches to combating or redefining these forms of violence, emphasizing the need to understand and respect the religious and cultural contexts in which these actions occur. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 360 | Women as Healers | Advanced examination of the role of women as caregivers, healers, physicians, midwives, and nurses in different cultures and historical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 364 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 earned hours; Credit is allowed for only AFR 365 (or AFH364) or WST 364 |
| WST | 365 | Women and International Health | Advanced study of gender-based disparities and global health, including impact of poverty, gender discrimination, political economy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 370 | Chronicling Women's Lives | Explores the lives of a selected group of American women as a point of departure for the chronicling of contemporary women's lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 371 | Sex and the City: Women, Sexuality, and Popular Culture | An in-depth study of the changing media representations of young, sexually autonomous women in the city. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 372 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better and minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| WST | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |
| WST | 374 | Desperate Housewives | In-depth examination of the representations of women as wives and/or mothers in the popular discourse from the 20th century to current day through an analysis of various forms of popular culture such as film, magazines, popular writing and television. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Minimum 30 hours; Credit is allowed for only WST 374 or 394 (Desp Housewives: Gender, Family & Pop Culture) |
| WST | 375 | Women and Social Change | In-depth course on feminist activism and social change. Combines research and theory on a contemporary social problem with a community action experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 376 | Feminist Theory | Explores feminist theories and the intersection of gender, race, ethnicity, and class through critical analyses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 377 | History of American Feminist Thought | Critical analysis of the origins and development of American feminist thought and political movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | H & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 378 | Global Feminist Theory | In-depth studies of global feminist theories and exploration of the intersections of gender, race, ethnicity, class, and nation through critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C & G | Pre-requisites: WST 100 or 300 or minimum 30 hours |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 382 | American Indian Women | Investigate the economic, political and ideological factors contributing to American Indian women's intellectual and creative activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites:WST 100, 300, or AIS 180 with a C or better; or co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit for only AIS 381 or WST 382 |
| WST | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: WST 100 or 300 with C or better |
| WST | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: WST 100 or 300 with C or better. Credit is allowed for only REL 390 or WST 390 |
| WST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | 413 | Queer Studies | In depth exploration of lesbian, gay, bisexual, transgender, and queer experiences in the U.S. and globally, from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 45 hours |
| WST | 420 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| WST | 421 | Girlhood and Adolescence | Critical analysis of the changing construction of girlhood and female adolescence through history, memoir, fiction, myth, music, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: WST 100 or WST 300 or minimum 30 hours |
| WST | 422 | Women, Law and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites:ENG 102, 105 or 108 with C or better; minimum 36 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 422 or WST 422 |
| WST | 430 | Gender on the Borderlands | Examines women's status in the U.S.-Mexico borderlands through key issues such as migration, labor, violence, education, and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better. Credit is allowed for only JHR 598 (Gender on the Borderlands) or WST 430 |
| WST | 440 | Politics of Women's Health | In-depth and interdisciplinary exploration of how women's social, cultural, and economic position affect their health and health care. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 444 | Gender, Health, and Bodies | Explores gender and health from a feminist perspective, including critical analyses of medicine, science, and popular culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisites: WST 100 or 300 with C or better; Credit is allowed for only MAS 598 (Gender, Health, and Bodies) or WST 444 |
| WST | 447 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| WST | 449 | Hate Speech, Manifestos, and Radical Writings | Examines writings, speeches and texts that provoke radical or even revolutionary social change. At its core, this course asks: What is the radical and what does it do? How do radical writings function as texts, speech acts, inspirational documents, testimonies, accounts of madness, frightening moments, calls to arms, peacekeeping entities or speaking truth to power? Examines injurious speech and provocative writings that span a range of social movements and topics, including radical feminism, radical queer, Black power, indigenous rights, art and performance, anti-technology, animal rights, violence, madness and revolutionary resistance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 35 hours; Minimum 2.50 GPA; Credit is allowed for only WST 394 (Hate Speech and Manifestos) or WST 449 |
| WST | 457 | Women, Cultures, and Societies | Examines issues such as poverty, dependency, interdependency, race, class, and gender in different societies of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 460 | Women and the Body | In-depth analysis of the cultural construction of the gendered body and societal prescriptions about beauty, body image, and size. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 464 | Voices and Visions | In-depth examination of topics in the humanities, which vary from semester to semester. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 467 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Latina, and Asian-American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better. Credit is allowed for only ENG 460 or WST 467 |
| WST | 470 | Gender and Popular Culture | Advanced interdisciplinary examination of how gender is constructed in various popular cultural forms such as film, television, magazines, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 471 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| WST | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| WST | 473 | Indigenous and Latina/Chicana Representation | Examines from an interdisciplinary perspective contemporary issues experienced by Indigenous and Chicana/Latina women in the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 475 | Women of the Diaspora across Cultures | Examines the socioeconomic condition, political formation, and identities of contemporary indigenous, ethnic minority, immigrant, and migrant women globally. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| WST | 477 | Women and Violence | Critical examination of forms of violence against women globally at individual, institutional, and cultural levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 480 | Gender Issues in Education | Examines the relationship between gender and educational access and outcomes as a result of public policy in a variety of communities and settings. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 483 | Women Writers Across Cultures | Comparative approach to contemporary writings by women from around the world. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 485 | Women, Gender, and Leadership | Explores the gendered nature of leadership and studies strategies that enable women to lead successfully in areas such as business, education, and public service. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 earned hours; Credit is allowed for only TCL 490 or WST 490 |
| WST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| WST | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 547 or WST 547 |
| WST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: degree-seeking graduate students only |
| WST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 601 | Critical Concepts of Gender | Key concepts, theoretical frameworks, disciplinary and interdisciplinary approaches, and the critical debates that have shaped the field of gender studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 602 | Mapping the Intersections of Gender | Theoretical concepts, metaphors, and frameworks employed by feminist scholars to understand the way gender articulates with other categories of difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 603 | Engendering Methodology | Focuses on the methodologies, epistemologies, and ethical dilemmas of researching gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 610 | Research in Women's Health | Interdisciplinary research seminar on social issues in women's health, women's health care, and medical attitudes toward the female body. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Degree-seeking graduate student |
| WST | 640 | Visual and Narrative Culture | Feminist analysis of gender representations in visual and narrative culture, including film, dramatic literature, fiction, and autobiography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: degree-seeking graduate students only |
| WST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 701 | Research Design and Proposal Development in Gender Studies | Prepares students for careers in gender studies by developing skills in research design, proposal writing, and identifying funding outlets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |

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| WST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: degree-seeking graduate students only |
| WST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| WST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| WST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| WST | | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |

| Subject | Catalog Number | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| YDL | 201 | Introduction to Youth Studies | Introduces a perspective on the everyday lives of youth in regard to experience, sex, age, relational context, and identity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| YDL | 210 | Urban Youth and Youth Studies | Explores the lives of young people from 12 to 22 years old in urban neighborhoods, communities, and cities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| YDL | 301 | Adolescent and Youth Development Leadership | Applies theory and research about youth, including how findings can be used and how theories facilitate behavior understanding. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| YDL | 450 | Youth Policy | Examines various federal and state policies designed for youth, how and why policies for youth are constructed. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |

Fall 2015

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AAD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AAD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| AAD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design MS student |
| AAD | 552 | Architectural Management II | Organizational, human performance, and market influences on architecture firms and projects. Readings, case studies, and analysis of managerial problems and solutions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Building Design MS, Master of Architecture, Master of Urban Design or Master of Landscape Architecture student |
| AAD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ABS | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only ABS 130 or BIO 130 |
| ABS | 207 | Applied Plant Taxonomy | Introduces identification of vascular plants emphasizing seed plants. Surveys seed plant families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (BIO 188); BIO 182 (BIO 187) |
| ABS | 225 | Soils | Fundamental properties of soils and their relations to plant growth, nutrition of man and animals, and environmental quality. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Prerequisite(s): CHM 101 or CHM 113 |
| ABS | 226 | Soils Laboratory | Selected exercises to broaden the background and understanding of basic soil principles. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-Requisite: ERM (ABS) 225 |
| ABS | 260 | Fundamentals of Sustainable Horticulture | Principles and practices of horticulture, emphasizing development, growth, and propagation of horticultural plants and environmental factors that affect these processes. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| ABS | 270 | Sustainable Biological Systems | Ecological foundations of sustainable biological systems, anthropogenic impacts on ecosystem structure and function, and ecological risk assessment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |

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| ABS | 271 | Veterinary Medicine Today | Introduces the role of the veterinarian as related to the fields of food supply and veterinary medicine. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 274 | Introduction to Wildlife Management | Managing wildlife in the Southwest, including life histories of small game, fur bearers, big game, and selected nongame specials. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |
| ABS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 302 | Ethical and Policy Issues in Biology | Policy environment and ethics in the practice of biology. Covers ethical reasoning, policy formulation, and regulatory agencies with examples from biotechnology and the environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 311 | Molecular and Cellular Biology | Overview of the biology of the cell; emphasizes structure and function of biomolecules within the cell and their applications associated with recombinant DNA technology, genetic engineering, plant and agriculture biotechnology, and human pharmaceutical development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or 188) ; BIO 182 (or 187) with C or better |
| ABS | 312 | Structure and Function | Surveys structural and functional attributes of plant and animals of particular importance in the applied biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |
| ABS | 314 | Applied Plant Physiology | Understanding control of plant growth and developmental processes through innovated technologies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182 |
| ABS | 350 | Applied Statistics | Statistical methods with applications in the biological sciences and natural resource management. Uses computers and the Internet. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ASC 315, MAT 117, 142 or other course meeting General Studies MA requirement with C or better |
| ABS | 355 | Ecology and Adaptations of Vertebrates | Evolution, classification systematics, diversity, anatomical and physiological adaptations anatomy, and physiology, specializations and conservation status of the vertebrates. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 182 (or BIO187) , and BIO 181 (or BIO188) |
| ABS | 360 | Southwest Home Gardening | Multimedia course for nonmajors surveying contemporary topics in Southwest home horticulture, including landscaping, flower and vegetable gardening, ciculture, interiorscaping, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 362 | Landscape Plants and Design | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 260 |
| ABS | 363 | Sustainable Landscape Practice | Landscape technologies and practices including landscape design theory, job costing and bidding, sprinkler and drip irrigation design, landscape installation, landscape valuation techniques, landscape ordinances, and maintenance practices of commercial and residential landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisites: ABS 260; Credit is allowed for only ABS or PGM 363 |
| ABS | 364 | Urban Forestry | Care, maintenance, and valuation of the urban forest, including public and private landscape codes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 368 | Plant Propagation | Theory and application of sexual and asexual propagation techniques. Considers plant materials used both for urban horticulture and ecological restoration applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 370 | Ecology | Interactions between organisms and their environments; structure and dynamics of populations, communities, ecosystems, and landscapes, with emphasis on vegetation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: BIO 181 |
| ABS | 376 | Wildlife Ecology | Examines ecological principles underlying wildlife population dynamics with emphasis on physiology, genetics, nutrition, and habitat factors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisites: ABS 274; ABS 370 |
| ABS | 378 | Animal Nutrition | Principles of nutrient metabolism in animal species; emphasizes understanding the interaction of animals with their environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182; CHM 101 or CHM 113 |
| ABS | 380 | Restoration and Wildlife Plants | Important wildland plants, including invasive and endangered species, wildlife food species, and species used for ecosystem restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 207 |
| ABS | 381 | Natural Resources Policy | Policies and regulations affecting management of natural resources, with emphases on wildlife and ecological restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 384 | Natural Resources Measurements | Inventory, sampling and monitoring techniques of natural resources. Data evaluation and interpretation as related to management, restoration and conservation needs of natural resources. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum 45 hours |
| ABS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 401 | Intermediate Statistics | Analysis of variance, multiple comparisons, multiple regression. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 425 | Soil Classification and Management | Principles of soil genesis, morphology, and classification. Presents management and conservation practices. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ETM 225 |
| ABS | 430 | Watershed Management | Hydrologic, physical, biological, and ecological principles applied to watershed management. Impact of ecosystem manipulations on water yield and quality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 434 | Soil Ecology | Soils viewed in an ecosystem context, soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370 or BIO 320; Credit is allowed for only ABS 434 or BIO 418 |
| ABS | 435 | Applied Systems Ecology | Simulation modeling as a tool to study ecological processes and human impact on ecosystems and organisms. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370, ABS 350 (or STP 420) |
| ABS | 440 | Ecological Restoration Techniques | Techniques for ecological restoration, riparian and wetland restoration, and monitoring restoration success. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisite: ABS 370; Credit is allowed for only ETM 440 or ASB 598 (Ecological Restoration Techniques) |
| ABS | 441 | Ecological Restoration Practicum | Field experience in the evaluation and monitoring of implemented ecological restoration projects. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: ABS 440 |

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| ABS | 460 | Organic Gardening | Applies principles and practices of organic gardening in the low desert, including environmental impacts of modern food production. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 462 | Greenhouse/Nursery Management | Greenhouse structures, environment, and nursery operations. Includes irrigation, nutrition, and other principles relative to production of nursery crops. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 260 |
| ABS | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 464 | Desert Horticulture | Students learn about and practice the principles of sustainable horticulture in an arid climate. Includes capstone projects on sustainability issues related to horticultural practice in arid environments. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ABS 260; Credit is allowed for only ABS 464 or ABS 494 (Sustainable Desert Horticulture) or ABS 498 (Desert Horticulture) |
| ABS | 470 | Life History of Mammals | Evolution, classification, environmental, anatomical and physiological adaptations, ecology, and conservation of mammals worldwide. Emphasis on the identification, habitat relationships, conservation, and management techniques of Arizona and select North American mammals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 |
| ABS | 472 | Applied Herpetology | Systematics, evolution, ecology and life history of amphibians and reptiles emphasizing wildlife management methodologies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 or BIO 370; Credit is allowed for only ABS 472 or 498 (Applied Herpetology) |
| ABS | 474 | Riparian Ecosystem Management | Management principles of riparian ecosystems based on fluvial geomorphological and ecological concepts. Discusses human impacts to riparian ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum 45 hours |
| ABS | 475 | Habitat Management for Small Wildlife | Habitat management considerations and practices for small game and nongame wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 376 |
| ABS | 476 | Big Game Habitat Management | Habitat management considerations and practices for big game wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum junior standing |
| ABS | 479 | Ecosystem Management and Planning | Principles of ecosystem management, with emphasis on economic and policy constraints on the planning process. Risk assessment and management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: Senior standing |
| ABS | 481 | Riparian and Wetland Restoration | Principles and problems in the restoration of degraded riparian and wetland ecosystems. Construction of wetlands. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ABS 370 |
| ABS | 482 | Ecology and Planning for Restoration | Ecological principles and resource planning processes applied to the restoration of degraded landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ETM 225; 440 |
| ABS | 483 | Restoration Planning Practicum | Field experience in ecological restoration techniques, selection of mitigation techniques, and implementation planning. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | Pre/Co-requisite: ETM 482 |
| ABS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| ABS | 485 | GIS in Natural Resources | Principles of Geographic Information Systems (GIS) utilized in natural resource management. Use of computers for spatial analysis of natural resources. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 350, STP 420, EGR 280 or PSY 230 |
| ABS | 486 | Introduction to Remote Sensing | Remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. Not for graduate credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): minimum 45 hours |
| ABS | 489 | Undergraduate Research | Undergraduate research under the supervision of an applied biological sciences faculty member. | N | RSC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| ABS | 490 | Applied Biological Sciences Seminar | Current literature and significant developments related to applications of the biological sciences. May be repeated for credit. | N | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Senior standing |
| ABS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ABS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ABS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| ABS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ABS | 541 | Advanced Rangeland Ecosystem Management | Combines the principles of ecology, planning and restoration in the application of rangeland ecosystem management. Studies fundamental topics such as range plant physiology, range plant ecology, rangeland stocking-rates and grazing systems in considering management practices for rangeland ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: Degree- or non-degree seeking graduate; Credit is allowed for only ERM 541 or ABS 598 (Adv Rangeland Ecosystem Management) |

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| ABS | 542 | Management of Fire Adapted Ecosystems | Fire adapted ecosystems which evolved with high-frequency and low-intensity fires now support a range of regimes from no fire to uncharacteristically large and intense fires, causing a concern about the current and future role of wildland fire as well as forest and rangeland health. Explores management considerations and techniques for reintroducing fire to these ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ABS 598 (Fire Ecology), or ERM 542 |
| ABS | 550 | Wildlife Dynamics | Explores major concepts in population and community ecology with an emphasis on their application to the study and management of wildlife species. Explores the theory and sometimes controversial nature of these concepts in the form of lectures and discussions. Instructor and student workshops and oral presentations of student research. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ERM 550 ABS 598 (Wildlife Dynamics) or ETM 598 (Wildlife Population Ecology) |
| ABS | 550 | Vegetation Dynamics | Dynamics of vegetation linking physiological, population, and community ecology. Collection and analysis of vegetation data. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 551 | Advanced Environmental Analysis | Advanced statistical procedures and experimental design for the biological sciences. Techniques for analyzing data that do not meet statistical assumptions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 553 | Riparian Ecology | Review of recent literature, developments, and methods related to riparian ecology. Applies soil and landscape ecology to riparian systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate (Degree and non-degree) students; Credit is allowed for only ABS, BIO 560 or MAT 561 |
| ABS | 570 | Advanced Animal Nutrition | Metabolic and physiological interactions of nutrients in wild and domesticated animals consuming natural feeds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 586 | Remote Sensing in Environmental Resources | Principles and application of remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 101 | Accountancy LEAP Program | The Leadership, Ethics, Accountability & Professionalism (LEAP) program aims to ensure a successful transition from high school to college and, ultimately, one's career. Based on the hallmarks of the accounting profession, provides the tools, resources, and expectations to succeed at ASU, W.P. Carey School of Business and the School of Accountancy. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1 | | |
| ACC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-3 | | |
| ACC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 231 | Uses of Accounting Information | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: CIS 105 (or CIS 236) or CSE 110 if Engineering Management major. Not open to Pre-BIS or Interdisciplinary Studies majors |

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| ACC | 232 | Financial Accounting I | Develops an understanding of the theory, concepts, principles and practices underlying preparation, interpretation, and use of external financial reports. Emphasizes interpreting the economic substance of events and transactions and their association with contemporaneous and prospective events, relationships, and outcomes. Gains understanding of the accounting information model and develops an ability to analyze and record business transactions and analyze basic financial statements. Meant for prospective accounting and finance majors (and students who plan current majors in these areas) and develops skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Accountancy or Finance majors; CIS 105, 220 or 236 with C or better |
| ACC | 241 | Uses of Accounting Information II | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): ACC 231, 261 or 303 with C or better |
| ACC | 242 | Managerial Accounting I | Develops an understanding of the theory, concepts, principles, and practices underlying managerial accounting. Emphasizes three functions managers must perform within their organizations: plan operations, control activities, and make decisions. Explains what accounting information is necessary, how to collect it, and how to interpret it. Meant for prospective accounting and finance majors and students who plan current majors in these areas and develop skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Open to W. P. Carey Accountancy and Finance majors, and others with School of Accountancy approval; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 261 | Honors Fundamentals of Financial Accounting | Covers basic financial accounting concepts and applications. Develops an understanding of the environment in which financial reporting choices are made. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; CIS 105 or CIS 220 or CIS 236 with C or better |
| ACC | 271 | Honors Fundamentals of Managerial Accounting | Covers basic managerial accounting concepts and applications. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 340 | External Reporting I | Financial accounting theory and practice related to external reporting. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W. P. Carey BS Accountancy or Finance BS student; Pre- or corequisite(s): FIN 300, 302 or 303 |
| ACC | 350 | Internal Reporting | Internal reporting systems for planning, control, and decision making. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 241, ACC 242 or ACC 271, AND ECN 221 or ECN 231 with C or better |
| ACC | 360 | Ethics for Professional Accountants | Addresses ethical obligations and responsibilities of professional accountants. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W. P. Carey BS Accountancy major |
| ACC | 382 | Accounting and Financial Analysis | Introduces nonbusiness majors to financial accounting concepts related to operating, financing, investing, and ethical decisions. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Non-Business student, must not have previously earned credit in ACC 230, 231, 232, 240, 241, 242, 261, 271 or BUA 381; min ASU cum GPA of 2.00 and min 56 total earned hours OR non-deg student with min ASU cum GPA of 2.00, OR grad student |
| ACC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 430 | Taxes and Business Decisions | Federal income taxation of sole proprietors, partnerships, corporations, fiduciaries, and individuals with an emphasis on tax consequences of business and investment decisions. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): W. P. Carey Accountancy BS student; ACC 340 with C or better; LES 305 with C or better |
| ACC | 440 | External Reporting II | Continuation of ACC 340 with emphasis on the recognition, research, and resolution of financial reporting issues. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 340 with C or better |
| ACC | 444 | Enterprise Process Analysis and Design | Addresses the major business processes of an enterprise, the impact of recent technological innovations and requisite internal controls. Advances an understanding of the current regulatory environment as it pertains to process controls. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Computer Info Systems BS student; ACC 241(or 242 or 271) with C or better; ECN 221 with C or better; FOR CIS MAJORS: CIS 235 or 236 with C or better |
| ACC | 445 | Honors Enterprise Process Analysis and Design | Analysis and design of efficient and effective business processes. Emphasizes taking advantage of new information technologies to improve managerial decision making. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student AND Accountancy BS or Computer Info Systems BS student; ACC 241, 242 or 271 with C or better; ECN 221 or 231 with C or better |
| ACC | 450 | Principles of Auditing | Standards and procedures in auditing. Planning, evidence gathering and accumulation, and reporting. Ethical and legal considerations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS student; ACC 440 with C or better |
| ACC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisites: W. P. Carey BS Accountancy major; 3.50 cumulative GPA; Minimum 72 hours; ACC 340, 350, 430, 440 and 450 with C or better |
| ACC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ACC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Accountancy BS student |
| ACC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |

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| ACC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-7 | L | Pre-requisite: Accountancy BS, Finance BS or Economics BS student |
| ACC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-3 | | Pre-requisite: Accountancy BS student |
| ACC | 502 | Financial Accounting | Contemporary financial accounting and reporting systems; emphasizes the interpretation and evaluation of a company's external financial reports. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 503 | Managerial Accounting | Managerial accounting concepts and procedures for internal reporting applied to the decision making activities of the professional managers. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 511 | Taxes and Business Strategy | Economic implications of selected management decisions involving application of federal income tax laws. Recognition of tax hazards and tax savings. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 512 | Advanced Auditing | Builds on the skills obtained in the beginning auditing (assurance) course and focuses on audit planning, risk assessment, evidence, and reporting procedures and fraud. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Master of Accounting student |
| ACC | 513 | Advanced Financial Accounting | Focuses on advanced financial accounting topics along with their application in the financial reporting process. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 571 | Taxation of Corporations and Shareholders | Tax aspects of the formation, operation, reorganization, and liquidation of corporations and the impact on shareholders. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 573 | Taxation of Pass-Through Entities | Tax aspects of the definition, formation, operation, liquidation, and termination of a partnership. Emphasizes tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 575 | Family Tax Planning and Wealth Transfer Taxation | Tax treatment of wealth transfers at death and during lifetime, with emphasis on tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 577 | Tax Research, Professional Responsibilities & Property Transactions | Federal tax issues and consequences, tax authority, property transactions and tax consequences of acquiring, holding and disposing of property. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major. Credit is allowed for only ACC 577 or ACC 591 (Tax Research, Professional Responsibilities & Property Transactions) |
| ACC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 582 | Information Security of Interorganizational Systems | Function and responsibility of the information security officer. Advanced topics in security methods and technology. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 585 | Performance Measurement and Advanced Managerial Accounting | Applies quantitative techniques to accounting problems. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Business Graduate student |
| ACC | 586 | Shareholder Value Creation and Financial Statement Analysis | Develops skills necessary to exploit financial reporting information in a business environment and appreciation of reporting issues faced by management. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 587 | Multi-Jurisdictional Taxation I | Multistate taxation and interplay between multistate tax issues and federal and state constitutional limitations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major |
| ACC | 588 | Professional Accounting Research | Applies the technical knowledge of accounting theory and principles developed in other academic courses through the use of "real life" case studies, where such knowledge and professional judgment is applied in resolving advanced accounting problems and issues. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Accountancy student |
| ACC | 589 | Multijurisdictional Tax II | Addresses the U.S. taxation of U.S. individuals and businesses that do business outside the U.S. as well as the U.S. taxation of foreign persons and tax treaties, allocation of income, foreign tax credits, and transfer pricing. Emphasizes planning related to some of the tax issues that commonly arise in cross-border businesses. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Taxation student |
| ACC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ACC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Business Administration (Accountancy) PHD student |
| ACC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACO | 100 | All About Data: Design, Query, and Visualization | Data modeling and design, spreadsheets, relational databases and querying, visualization and XML. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | |
| ACO | 101 | Introduction to Computer Science | Concepts of problem solving, structured and object-oriented programming in Java, fundamental algorithms, computer system concepts. Social and ethical responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: MAT117 with C or better OR Mathematics Placement Test with a score of 50% or higher |
| ACO | 102 | Object-Oriented Programming | Object-oriented programming using introductory algorithms and data structures. Overview of concepts in computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 101 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| ACO | 201 | Data Structures and Algorithms | Static and dynamic data structures, recursive and iterative sorting and searching, object-oriented design and programming, software design models and implementation/testing strategies, professional responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: ACO 102 and MAT 210 with C or better |
| ACO | 210 | Introduction to Systems Programming | Introduces operating systems as resource managers, processes, threads, memory allocation, file systems, protection, system calls, application program interfaces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 201 with C or better |
| ACO | 220 | Introduction to Database Systems | Introduces database management systems concepts. Entity-relationship and relational data models. Database design. Relational algebra, calculus, and SQL query languages. Query optimization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 210; MAT 243. Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |

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| ACO | 320 | Database Systems | Entity-relationship and relational data models. Database design theory. Relational algebra, calculus and SQL query languages. Query optimization. XML fundamentals. Transactions, recovery and concurrency control. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 210 with C or better; MAT 243 with C or better; Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| ACO | 321 | Database Development & Applications | Stored procedures and triggers. Security and authorization. Call-level interface. Database Web applications. Advanced topics. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 320 with C or better. Credit is allowed for only ACO 321 to CSE 414 |
| ACO | 330 | Computer Networks | Network architecture and protocols, principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 210 with C or better. Credit is allowed for only ACO 330 or CSE 434 |
| ACO | 331 | Network Design | Fundamental network design principles, internetworking design, network architectures, network management, traffic analysis, security management, case study and hands-on experiments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 330 with C or better |
| ACO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | N | RSC | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Prerequisite(s): ACO 102; minimum 30 hours |
| ACO | 420 | Large-scale Data Management | Modern technologies to manage, process and analyze big data. Data processing of large data sets with Map/Reduce. NoSQL data stores. NewSQL databases. Data visualization. Applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 421 | Data Mining and Warehousing | Introduces data mining from a database perspective, including classification, clustering, and association rules. Data warehousing methodologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 422 | XML and Databases | XML data model, schema specification and validation, querying, storage, indexing, and current research topics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 430 | Wireless Networks | Wireless transmission fundamentals, multiple access techniques, error detection and control, cellular concepts and systems, wireless LAN, performance analysis, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and STP 300 with C or better |
| ACO | 431 | Network Security | Digital threats and attacks, cryptography, confidentiality, authentication protocols, message integrity, security in network applications, intrusion detection, malicious software countermeasures, firewalls. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and MAT 243 with C or better |
| ACO | 432 | Distributed Systems | Distributed system models, distributed programming technique, clock synchronization, distributed snapshot, distributed mutual exclusion, concurrency control, fault tolerance, security, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210 and ACO 330 with C or better |
| ACO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| ACO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ACO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | L | |
| ACO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| ACT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 201 | Introduction to Elements and Techniques of Actuarial Science | Introduces important aspects of actuarial work. Exposes the development of actuarial techniques in the context of life insurance, casualty and property insurance, superannuation and investment. Develops problem-solving skills and gives basic tools for risk management and financial modeling, including the use of Excel spreadsheets for both, calculations and simulations. Shows how studies in related disciplines (such as accounting, demography, economics, statistics, computing and mathematics) are essential to the education of an actuary. Guest speakers from the industry share their knowledge and insight on how to become a successful actuary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: CIS 105 and MAT 270 with B or better |
| ACT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ACT | 310 | Mathematics of Finance | Prepares potential actuaries to master national exams. Provides an understanding of the fundamental concepts of financial mathematics and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use in: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting and valuing contingent cash flows. Topics include: mathematics of compound interest including annuities certain, amortization schedules, yields curves, sinking funds and bonds. Gives an introduction to financial instruments including derivatives and the concept of no-arbitrage as it relates to financial mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Pre-requisite: ACT 201 with B or better; MAT 270 with B or better; Credit is allowed for only ACT 310 or MAT 340 |
| ACT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 415 | Probability for Risk Management | Prepares potential actuaries to master national exams. Develops knowledge of the fundamental probability tools for quantitatively assessing risk. Topics include: introduction to probability concepts including definition of probability, independence, conditional probability, random variables, specific discrete and continuous probability distributions, multivariate random variables, moments and moment generating functions, functions of random variables, sampling distributions and central limit theorem. Emphasizes the application of these tools to problems encountered in actuarial science. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: ACT 201; MAT 272; Credit is allowed for only ACT 415 or STP 326 |
| ACT | 430 | Mathematics of Financial Derivatives | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. Topics include: option pricing, Black-Scholes formula, delta hedging, exotic options, Brownian motion, interest rate models and simulations. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 310 with B or better |
| ACT | 440 | Life Contingencies I | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: life tables, present value determination for life insurances and annuities, benefit premiums and reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 415 with B or better; MAT 343 with B or better |
| ACT | 441 | Life Contingencies II | Prepares potential actuaries to master the national exams. Develop the student's knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: multiple life functions, multiple decrement models and benefit reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 440 with C or better |
| ACT | 450 | Actuarial Models and Modeling I | Prepares potential actuaries to master the national exams. Helps student understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: survival, severity, frequency and aggregate models and their modifications. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: ACT 415; STP 427 |
| ACT | 451 | Actuarial Models and Modeling II | Prepares potential actuaries to master the national exams. Helps students understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: construction and selection of parametric models, Bayesian estimation, credibility and simulation. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 450 with C or better |
| ACT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| ACT | 491 | Actuarial Exam Preparation Seminar | Provides potential actuaries with review and practice for an actuarial examination. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s) with B or better: ACT 310 (or ACT 415 or 430 or both ACT 440 and 441 or both ACT 450 and 451) |
| ACT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| ACT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ADE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 242 | Introduction to Building Systems | Materials and methods of construction. Aesthetic, code and construction costs. Exposure to building information management (BIM). | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Architectural Studies major; Co-requisite: ALA 226. Credit is allowed for only ADE 242 or ATE 294, Building Systems |
| ADE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 321 | Architectural Studio I | Introductory building design problems. Emphasizes design process, communication methods, aesthetics, construction, and technology. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architecture student; ALA 226 with C or better |
| ADE | 322 | Architectural Studio II | Site and building design problems. Emphasizes programmatic and environmental determinants and building in natural and urban contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 321 with C or better |
| ADE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 421 | Architectural Studio III | Topical design problems of intermediate complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: ADE 322 with C or better; Co-requisites: APH 421, ATE 451 |
| ADE | 422 | Architectural Studio IV | Topical design problems of advanced complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 421 with C or better |
| ADE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ADE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ADE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ADE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| ADE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture, Master of Landscape Architecture, or Master of Urban Design |
| ADE | 510 | Foundation Architectural Studio | Fundamentals of architectural design, methodology, visualization, and representation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 511 | Core Architectural Studio I | Applies design fundamentals in architectural problems, including construction, technology, programmatic and environmental determinants. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 510 with C or better |
| ADE | 512 | Core Architectural Studio II | Applies architectural design fundamentals to increasingly complex problems, including specific sites and activities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 511 with C or better |
| ADE | 521 | Advanced Architectural Studio I | Design problems emphasizing theory, aesthetics, and tectonics as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 522 | Advanced Architectural Studio II | Design problems emphasizing the comprehensive integration of building systems and technologies as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 521 with a C or better; Co-requisites: APH 505 and ATE 556 |
| ADE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |

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| ADE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | PRA | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 621 | Advanced Architectural Studio III | Design problems emphasizing the urban context, planning issues, and urban design theory as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better; Co-requisite: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |
| ADE | 622 | Advanced Architectural Studio IV | Individual, student-initiated project reflecting a culminating synthesis of architectural ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better; Co-requisites: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |
| ADE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| AEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 313 | Aircraft Dynamics and Control | Aircraft static stability; equations of motion; dynamic modes and stability; stability derivatives; response to controls; introduces automatic control of aircraft. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 318 with C or better |
| AEE | 325 | Aerospace Structures and Materials | Applies structural analysis to aircraft and spacecraft structures. Loads on aerospace structures, buckling and stability, stiffened panels, primary wing and launch-vehicle structure, vibration of large structures, properties and selection of aerospace structural materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisites with C or better: Aerospace Engr major: MAE 213 & 384; MAT 267 or 272. OR Mat Sci & Engr major: MSE 211 & 415 (or 315); MAT 267 or 272; Credit is allowed for only AEE 325 (or MAE 325), MEE 322, or MAE 394 (Structural Materials in Aerospace) |
| AEE | 344 | Fundamentals of Aircraft Design | Aircraft performance, RFP's, Federal Aviation Regulations, aircraft sizing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 214 and 384 with C or better; Pre- or corequisite(s): AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better if completed |
| AEE | 360 | Aerodynamics | Airfoils and wings, ideal flow, boundary layers, finite-difference solutions, wind-tunnel testing. Both AEE 360 and AEE 362 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; ENG 102 or 105 or 108 with C or better; MAE 240 and MAE 384 with C or better; MAT 267 or 272 with C or better |
| AEE | 362 | High-Speed Aerodynamics | Compressible flow at subsonic and supersonic speeds; ducts, nozzles, and diffusers: normal and oblique shocks, transonic flow, numerical solutions; experimental applications. Both AEE 362 and AEE 360 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 384 with C or better |
| AEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 415 | Vibration Analysis | Free and forced response of single and multiple degree of freedom systems, continuous systems; applications in mechanical and aerospace systems numerical methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 318 and 384 with C or better; Credit is allowed for only AEE 415 or MAE 598 (Vibration Analysis) |
| AEE | 426 | Design of Aerospace Structures | Flight vehicle loads, design of semimonocoque structures, local buckling and crippling, fatigue, aerospace materials, composites, joints, and finite element applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Aerospace Engineering BSE major; AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better; Credit is allowed for only AEE 426 or MAE 598 (Design of Aerospace Structures) |
| AEE | 445 | Fundamentals of Spacecraft Design | Spacecraft subsystems. Systems engineering, space mission design, space environment. Cost analysis. Risk and reliability analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 325 (or MAE 394 Aerospace Structures and Materials) with C or better; MAE 214 and 318 with C or better; Credit is allowed for only AEE 445 or MAE 494 (Fundamentals Spacecraft Dsgn) |
| AEE | 462 | Space Vehicle Dynamics and Control | Attitude dynamics and control, orbital mechanics, orbital transfer/rendezvous, spacecraft control systems design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better |
| AEE | 463 | Aircraft Propulsion | Fundamentals of gas-turbine engines. Analysis and design of components. Alternative aircraft propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 362 with C or better; MAE 384 with C or better |

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| AEE | 465 | Rocket Propulsion | Rocket flight performance; nozzle design; combustion of liquid and solid propellants; component design; advanced propulsion systems; interplanetary missions; testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 or MAE 362 with C or better; MAE 462 with C or better |
| AEE | 466 | Rotary Wing Aerodynamics and Performance | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 with C or better; Credit is allowed for only AEE 466 or MAE 566 |
| AEE | 468 | Aircraft Systems Design | Group projects related to aircraft vehicle design, working from mission definition and continuing through preliminary design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 313 and 344 with C or better; MAE 400 with C or better; Pre- or corequisite(s): AEE 463 with C or better if completed |
| AEE | 469 | Projects in Astronautics or Aeronautics | Various multidisciplinary team projects available each semester. Projects include design of high-speed rotorcraft autonomous vehicles, liquid-fueled rockets, microaerial vehicles, satellites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |
| AEE | 471 | Computational Fluid Dynamics | Numerical solutions for selected problems in fluid mechanics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 or MEE 340 with C or better; MAE 384 with C or better; Credit is allowed for only AEE 471 or MAE 561 |
| AEE | 478 | Fundamentals of Autonomous Aircraft Systems | First of a two-semester capstone sequence. Introduces autonomous aircraft performance and operations, aircraft performance prediction, ground control and support, sensors, communications and telemetry, aerospace ethics and law, design methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s) with C or better: AEE 313, 360 |
| AEE | 479 | Design of Autonomous Aircraft Systems | Interdisciplinary capstone design project for aerospace and electrical engineering students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: MAE 400 with C or better; AEE 478 with C or better |
| AEE | 480 | Space Systems Design | Group projects related to space systems design, working from mission definition and continuing through conceptual design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 445 (or MAE 445) with C or better; EEE 350 with C or better; MAE 214 with C or better; Pre- or corequisite(s): AEE 465 (or MAE 465) with C or better if completed |
| AEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| AEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| AEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| AEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| AEP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AEP | 501 | Practical and Professional Ethics | Acquaints students with practical and professional ethics. Assumes no prior experience in ethics, and provides practicable knowledge as well as theoretical knowledge. The first in a series of courses for the MA program in Applied Ethics and the Professions, the course is primarily intended to prepare students in that degree program for their subsequent courses. However, it has been designed to be useful to all graduate students who are interested in learning about practical and professional ethics. The beginning of the course is devoted to the more general subjects of practical ("everyday") ethics and professional ethics, while the remaining weeks are spent focusing on the ethical issues that occur in the context of specific professions, with particular emphasis given to those professions that seem most relevant to the aspirations and interests of the students enrolled in the course. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): graduate student or Barrett Honors student |
| AEP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AES | 101 | Air Force Today I | Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 102 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes common Air Force customs and courtesies, drill and ceremonies, health and physical fitness through group participation. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 101 |
| AES | 103 | Air Force Today II | Introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: introduction to leadership, Air Force core values, introduction to interpersonal communication and team building, and a continuation of communication skills. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 104 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes learning the environments and dynamics of an Air Force officer. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 103 |
| AES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AES | 201 | The Evolution of USAF Air and Space Power I | Focuses on facilitating the transition from Air Force ROTC cadet to Air Force ROTC candidate. Examines the general aspects of air and space power through a historical perspective. Utilizing this perspective, covers a time period from the first balloons and dirigibles to the modern technology currently used in overseas contingency operations. Featured topics include: Air Force heritage, Air Force leaders, introduction to ethics and values, group leadership problems and continuing application of communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |

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| AES | 202 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Provides application of advanced drill and ceremonies; issuing commands; knowing flag etiquette; and developing, directing, and evaluating skills to lead others. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 201 |
| AES | 203 | The Evolution of USAF Air and Space Power II | Provides knowledge-level understanding for general element and employment of air and space power. Furthermore, discusses the importance of Air Force Core Values with use of operational examples and historical Air Force leaders. Continues to develop communication skills. Topics include: the Air Force mission and organization, modern joint expeditionary Airmen, officer opportunities, and professionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 204 | Leadership Lab | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes preparation for field training. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 203 |
| AES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-4 | | |
| AES | 301 | Air Force Leadership Studies I | Study of communication skills, leadership and quality management fundamentals, leadership ethics, and professional knowledge required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 302 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experiences applying leadership and management principles to motivate and enhance the performance of other cadets. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 301 |
| AES | 303 | Air Force Leadership Studies II | Continuation of AES 301. Topics include: communication skills, ethics, leadership, professional knowledge, and quality management required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 304 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes planning the military activities of the cadet corps and applying advanced leadership methods. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 303 |
| AES | 401 | National Security Affairs | Examines advanced ethics, Air Force doctrine, national security process, and regional studies. Special topics include: civilian control of the military, military justice, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 402 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experience demonstrating learned skills in planning and controlling the military activities of the corps. | N | LAB | Y | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 401 |
| AES | 403 | Preparation for Active Duty II | Continuation of AES 401. Topics include: civilian control of the military, doctrine, ethics, military justice, the national security process, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | | |
| AES | 404 | Leadership Lab | Continuation of AES 402 with emphasis on preparation for transition from civilian to military life. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | |
| AES | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-7 | L | |
| AES | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | |
| AES | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 210 | Measurements and Testing | Measurement systems, components, system response, and the characteristics of experimental data. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 112; Pre/Corequisite(s): MAT 266 |
| AET | 215 | Aircraft Systems | Principles and design features of aircraft structures, systems, and materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| AET | 300 | Aircraft Design I | Applied aerodynamics, standard atmosphere, speed measurement, infinite and finite wings, airplane performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: AET 215; MET 211, ECE 210, or MAE 212 |
| AET | 415 | Gas Dynamics and Propulsion | Introduces compressible flow, internal and external flow, and aerothermodynamic analysis of propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): AET 300; MET 340 or MAE 340 or Fulton Schools of Engineering graduate student |
| AET | 417 | Aerospace Structures | Analysis and design of aircraft and aerospace structures. Shear flow. Semimonocoque structures. Effects of dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MET 213, MET 313 (or ECE 313); MET 212, AET 312 (or ECE 312); AET 300 |

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|---------|-------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| AET | 420 | Experimental Aerodynamics and Wind Tunnels | Experimental applied aerodynamics related to aeronautical and mechanical design. Wind tunnel design and testing. Low speed flows. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: AET 300; MET 340 |
| AET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AET | 524 | Application of Heat Transfer | Energy conservation, steady-state and transient conduction, convection transfer, free and forced convection Reynolds analogy, blackbody and environmental radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 432 or MAE 340; Credit is allowed for only AET 524 or AET 432 |
| AET | 525 | Advanced Propulsion | Mechanics and thermodynamics of propulsion systems. Solid, liquid propellant rocket design performance. Electrical nuclear propulsion systems. Space missions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 434, AET 415 or MAE 340 |
| AET | 560 | Numerical Methods in Engineering Technology | Analyzes problems in physical sciences, models physical problems, perturbation techniques, curvefitting, data analysis, numerical solutions, ordinary and partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Engineering students; Senior or higher academic level |
| AET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 364 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours. Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AFR | 191 | First Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AFR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 200 | Introduction to Africana Studies | Introduces the study of African and African-descended peoples; theory, themes, and perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | |
| AFR | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| AFR | 210 | Introduction to African American Studies | Examines the political, historical, and cultural origins of African American studies as an academic discipline. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | |
| AFR | 212 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| AFR | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |

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| AFR | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |
| AFR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 300 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |
| AFR | 301 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| AFR | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| AFR | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present; looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |
| AFR | 305 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| AFR | 310 | African/African American Psychology | In-depth study of the historical development of African and African American psychology. Course will critically examine the African American frame of reference as well as examine African and African American psychology from a contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 312 | Contemporary African and African Diaspora Women | A critical analysis of recent literary, theoretical, and methodological themes concerning the study of African and African Diaspora women. Particular study will focus on the historical impact these themes have had on the phenomena of transformation by various African and African Diasporan women's populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 317 | Genes, Race and Society | An in-depth examination of the biological and social construction of race in western societies. Special emphasis is placed on examining these constructs from a historical perspective | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 318 | African and African Diaspora Women Writers | Intersection of race, class, gender, and ethnicity in black women's fiction from the United States, the Caribbean, and Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| AFR | 320 | Africa: Politics, Environment, and Development | An in-depth analysis of the African experience as a way to understand the consequences of human environment relationships, wealth and power differentials, and individual and global citizenship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 325 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| AFR | 327 | Human Rights in Africa | In-depth study of the development of African organizations and instruments engaged in the dynamic processes of conceptualizing human rights that reflect its particular histories. It will also assess the effectiveness and appropriateness of efforts to address the human rights abuses and violations found in Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AFR | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| AFR | 331 | Studies in African American Women Writers of Pre-Harlem Renaissance | In depth analysis and advanced comparative study of novels, short stories, essays, speeches, and dramas that gave voices to African American woman in the pre-Harlem Renaissance era. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) and ENG 101 or 105 or 107 with C or better OR ENG 101 or 105 or 107 with C or better and minimum 45 hours |
| AFR | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ASB 222; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| AFR | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AFR | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and Africans Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| AFR | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| AFR | 340 | The Making of Modern Africa | Advanced study of the events and processes leading up to the colonization of Africa and the subsequent changes in African societies under colonial rule and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| AFR | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CE/TCL 394 (Inequality & Diversity in Education) |
| AFR | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| AFR | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| AFR | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| AFR | 355 | Democracy and Civil Society in Africa | Advanced examination of contending perspectives on the state and civil society of Africa. Course will specifically analyze the democratic struggles in sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 360 | Black Families in the Diaspora: U.S. and Caribbean | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| AFR | 363 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| AFR | 364 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AFR | 365 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 365 (or AFH 364) or WST 364 |

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| AFR | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Places special study on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| AFR | 370 | Family, Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| AFR | 372 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| AFR | 373 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| AFR | 375 | Race, Gender and Sport | Advanced and interdisciplinary examination of the social concepts of race and gender and their economic impact on sports in America. In-depth studies will focus on the role of regulatory agencies, the impact of these regulatory agencies have on sport as well as multiple legal issues surrounding athletics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 380 | Health Issues in the African American Community | In-depth examination and discussion of African American health across the lifespan. Discusses the factors associated with disparities in health and healthcare. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 380 (or AFS 380) or 394 (Hlth Issues Af/Am Community) |
| AFR | 383 | Blacks in Science, Medicine and Public Health | In-depth study of Blacks who have made significant contributions to science and medicine in the U.S. Begins with a critical examination of ancient African scientific contributions. Highlights specific individuals, analyzing their life's path to their respective careers. Also discusses the role of racism and discrimination and their efforts to overcome these. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 383 (or AFS 383) or AFS 394 (Blacks in Science, Medicine, and Public Health) |
| AFR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 418 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| AFR | 420 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |
| AFR | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| AFR | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |
| AFR | 460 | Race, Gender and Media | Reading seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |
| AFR | 465 | Harlem Renaissance: a Cultural History: 1877-1945 | Socio-political, historical contexts and worldwide ramifications of the cultural productions (theater, music, visual arts, and literature) of the Harlem Renaissance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| AFR | 466 | Peoples and Cultures of Africa | An in-depth study of the diversity of African people and culture from an interdisciplinary perspective. Emphasizes social, political, and economic relations, as well as inequality, art, gender roles, slavery, and slave trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| AFR | 470 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| AFR | 480 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| AFR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| AFR | 490 | Field Studies in the Diaspora | Introduces methods and principles of research applied to Black communities within and outside Arizona. Involves working with field officer and faculty. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |

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| AFR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AFR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Prerequisite(s): 9 upper-division hours or AFR 200 (or AFS 200) and junior standing |
| AFR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| AFR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AFR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better. Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AGB | 100 | Introduction to Agribusiness | Overview of agribusiness industries and career opportunities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 302 | International Management and Agribusiness | Management and agribusiness issues in the transition of developing countries from subsistence to global operations and competition. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | G | Pre-requisite: ECN 212 or ECN 214 with grade of C or better. Credit is allowed for only BUA 394 (Perspectives in Global Business) or MGT 302 |
| AGB | 321 | Agribusiness Marketing | Focuses on food and consumer products marketing at an intermediate level. Covers strategic concepts such as situational analysis, planning and objectives, and target marketing and positioning. Illustrates both the theory and application of strategic decision making through case analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 333 | Agribusiness Finance | Introduces financial markets and institutions. Interest rate determination, money and banking, equity markets, farm credit system, vendor financing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): ACC 231 |
| AGB | 340 | Food Processing | Introduces processed food quality assurance, statistical sampling, and inspection procedures. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 360 | Agribusiness Statistics | Statistical methods with applications in agribusiness and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | CS |
| AGB | 366 | Agribusiness Production Technologies | Examines methods for managing diverse crop and livestock enterprises with an emphasis on growth, development, marketing, and loss prevention. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 367 | Agribusiness Processing Technologies | Biotechnology and other methods used in the production, processing, and distribution of food. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AGB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 410 | Agribusiness Management | Principles of human resource management in agribusiness firms. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 414 | Agribusiness Analysis | Analysis of agribusiness firm decisions in the ecological, economic, social, and political environments. Special emphasis on ethical issues surrounding food production and consumption. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | L | Prerequisite(s): Minimum 87 hours; AGB 321 and 333 |
| AGB | 420 | Food Advertising and Promotion | Focuses on advertising and promotional strategies in the food industry, with an emphasis on the Consumer Packaged Goods (CPG) industry. Recommended proficiency in the computer applications used in this class: word processing, spreadsheets, graphics, presentations, and the Internet. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, MKT 300, 302, 303 or TMC 310 (BUA 382) |
| AGB | 422 | Consumer Behavior | Applies behavioral concepts in analyzing consumer food purchases and their implications for marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300, or TMC 320 |
| AGB | 424 | Agribusiness Sales | Principles and techniques of selling and merchandising in the agricultural and food industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 425 | Food Supply Networks | Methods, resources and information used to store and deliver food products in a global market. Supplier and customer perspectives help students understand what it takes to develop competitive advantage through distribution and logistics in a global marketplace. Emphasizes food supply network complexities and system design that helps develop critical thinking skills students will be able to use in any area of business. Practicum section with field trips to major food business firms, governmental organizations and industry associations located in metro Phoenix and Nogales area. | N | LEC | N | GNA | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite:AGB 321, FIN 300, or TMC 320 |
| AGB | 429 | Marketing Research | Examines the marketing research process and its role in facilitating agribusiness decisions. Emphasizes problem identification, survey design, and data analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: AGB 321 and MKT 300 with C or better. |
| AGB | 431 | Agribusiness Financial Management | Comprehensive treatment of topics in financial management of agribusiness: capital structure, dividend policy, asset valuation, mergers and acquisitions, risk management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300 or TMC 320 |
| AGB | 433 | Agribusiness Financial Markets | Role and function of agribusiness in U.S. financial system. Topics include rural banking, farm credit system, monetary policy, and federal reserve. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 333 or FIN 300 |
| AGB | 434 | Agricultural Risk Management and Insurance | Strategies to manage agricultural price and business risk: derivatives, insurance, self-insurance, and public policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 435 | Commodity Futures and Options Markets | Provides an understanding of how to use futures and options markets in a risk management and pricing context, especially as it pertains to the marketing and procurement of agricultural commodities by grain and livestock merchandisers, food manufacturers, and producers/distributors/consumers of natural resources. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 440 | Food Safety | Control, prevention, and prediction of microbial and chemical food-borne diseases. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 445 | Food Retailing | Food retail management. Discusses trends, problems, and functions of food retail managers within various retail institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321 or TMC 310 (BUA 382) or MKT 300 or MKT 302 or MKT 303 |
| AGB | 452 | International Agricultural Policy | Use of international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 454 | International Trade | International practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: AGB 302 |
| AGB | 456 | Food Product Innovation and Development | The food product development process and how it interfaces with food technology and packaging concepts. Emphasizes the team approach, which is prevalent in the food industry. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): senior standing |
| AGB | 481 | Microeconomic Analysis of Food Markets | By applying the basic concepts of microeconomics to real-world data, this course allows the student to not only gain a book-oriented understanding of how businesses in the food industry behave, but practical, hands-on experience that lasts far beyond the classroom. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | | Prerequisite(s): Barrett Honors student |
| AGB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AGB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | L | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AGB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 511 | Advanced Agribusiness Management | Analysis of organization behavior, change, and resource requirements within agribusiness systems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 514 | Advanced Agribusiness Analysis | Vertical integration and differentiation in food and agricultural industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 528 | Advanced Agribusiness Marketing | Theory and analysis of marketing strategy related to food and fiber products. Covers concepts of strategic market planning (e.g., segmenting, targeting and positioning), with application of these concepts at an advanced level. Also examines the broad social, cultural, political and economic issues that impact marketing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 529 | Advanced Agribusiness Marketing Channels | Analyzes agribusiness market channel systems. Formulation of marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 532 | Advanced Agribusiness Finance | Financial management of agribusiness firms; agribusiness financial analysis, investment analysis, agricultural risk management, and introduction to agricultural financial intermediaries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 535 | Commodity Analysis | Analysis of commodity markets. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 552 | International Agricultural Policy | Uses international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 554 | Advanced International Trade | Advanced international practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 560 | Advanced Agribusiness Management Systems | Development and use of decision support systems for agribusiness management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 561 | Applied Econometrics | Uses model building, hypothesis testing, and empirical analysis in solving agribusiness problems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 570 | Managerial Economics for Agribusiness | Concepts in micro- and macroeconomics applied to agribusiness management environments: price formation, market structure, information economics, fiscal and monetary policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 589 | Agribusiness Capstone | Strategic management of organizations focusing on developing value-creating strategies in dynamic environments. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AGB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 701 | Advanced Agribusiness I | Advanced topics include demand analysis, empirical industrial organization, welfare economics, agricultural policy, international trade, and consumer behavior. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 702 | Advanced Agribusiness II | Topics include macromarketing, marketing research, futures and options markets, derivatives, risk management, financial innovation, and forecasting. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 703 | Agribusiness Research Methods | Survey course in current research methods in economics, marketing, finance, and management as applied to agribusiness topics. May be repeated for credit. | N | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 180 | Introduction to American Indian Studies | Introduces the study of American Indian justice issues from an interdisciplinary perspective. Primary topics include sovereignty, law, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 280 | American Indian Sovereignty and the Courts | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 285 | Federal Indian Policy | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 320 | American Indian Philosophies and World Views | Does it make sense to speak about American Indian intellectuals, thinkers or philosophers? Not only have Indians been thinking and thinking deeply for generations, but they have also produced a body of written works that have formed the foundation of contemporary American Indian studies. Covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): junior standing; ENG 102, 105 or 108 with C or better. Credit is allowed for only AIS 320 or 394 (American Indian Philosophical/World Views) |
| AIS | 360 | Issues in Urban Indian Country | In-depth examination of the historical, social, economic, and political implications of indigenous migrations to urban areas. Over 50% of Native people are living in cities. What are they doing? Why are they there? Are they still under the federal trust relationship? Evaluates the social, political, and economic structures built by American Indians living in the urban environment. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 360 or 394 (Issues in Urban Indian Country) |
| AIS | 370 | American Indian Languages and Cultures | Emphasizes understanding of Indian language families and the relationship of oral traditions to culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisite: AIS 180 with C or better |
| AIS | 380 | Contemporary Issues of American Indian Nations | Surveys legal, socioeconomic, political, and educational state of contemporary reservation and urban Indians. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 381 | American Indian Women | Draws from a diverse range of Indigenous critical traditions to examine discourses of gender, identity, and sexuality as sites of cultural revitalization and conflict and theorizes the meaning of each of these categories from diverse Indigenous communities. Considers contemporary and traditional works by Indigenous women with a special emphasis on the historical, socio-cultural, and legal contexts of each work. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisites: WST 100, 300, or AIS 180 with C or better OR co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit is allowed for only AIS 381 or WST 382 |
| AIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 420 | American Indian Studies Research Methods | Surveys diverse research methods, including statistical, historical, interpretative, and narrative approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | L | Pre-requisite: AIS 180 with C or better |

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| AIS | 430 | Contemporary Indigenous Spirituality | Why do so many indigenous people across North America want to revitalize their traditional ways when there is supposedly so much opportunity awaiting them in all segments of American society? What are the benefits of such an endeavor and what might be the consequences if this objective is not pursued? This course is premised on the hypothesis that indigenous customs and beliefs contain knowledge that is not only vital to the well-being of the communities in which this native wisdom is found, but also to those communities seeking a more sustainable way of living in the land they call home. After delving into a critique of the religious principles that went into the settling of America, complete with notions of manifest destiny, a way is opened for a more native-oriented discourse on community, nature, economy, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 430 or 494 (Ind Spirituality in Postmodern) |
| AIS | 455 | Human Rights and Cultural Resource Laws | Examines how U.S. laws, policies, executive orders, and court decisions have affected Indian nations and peoples in matters of cultural resources and burial rights. Considers the protests, legal battles, and political campaigns Indians have waged to reaffirm their fundamental human rights in the areas of repatriation and sacred sites protection. Examines the ways in which filmmakers and the media present these issues to the public. Assesses the present status of Indian religious rights and cultural resource laws. Sovereignty and its relationship to Indian spirituality is a theme that permeates the course. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 455 or 494 (American Indian Cultural Resources) |
| AIS | 470 | Tribal Governance | Critical and historical examination of Indigenous governance and leadership. Includes a survey of historical policy developments and political change that laid the foundation for contemporary Indian government and an assessment of the effectiveness of modern tribal administrations and decision-making bodies. Explores the diverse approaches to tribal governance, community-based political strategy and local interpretations and assertions of sovereignty and self-governance. Project work facilitates focused student learning on the challenges and opportunities in government for a specific Indian nation. Case work and consultation with practitioners in Indian government complement textbook reading in law, history and policy. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: AIS 285; Credit is allowed for only AIS 470 or AIS 494, Tribal Governance |
| AIS | 480 | Actualizing Decolonization | Provides an in-depth investigation of the theory and concepts of colonization, decolonization, and Indigenous peoples in America, with brief comparisons with global Indigenous peoples and experiences. Covers classic scholarly works on colonization and decolonization to understand the frameworks in which colonization and decolonization develops, expands, and impacts Indigenous peoples. Through that theoretical understanding, examines and formulates ways in which decolonization can impact and be integrated into Indigenous lives and communities. Students shift from theory to praxis by writing and presenting on an informal grant proposal for a decolonizing project that can be implemented in an Indigenous or non-Indigenous community. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisites: ENG 101; ENG 102; Junior standing; Credit is allowed for only AIS 480 or 494 (Readings-Decolonization) |
| AIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| AIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-7 | L | |
| AIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AIS | 501 | American Indian Studies Paradigms | American Indian Studies emerged as an academic discipline in the late 1960s in part because of increasing dissatisfaction among Indians about the works of historians, anthropologists, and other scholars that was very often marred by methodological and conceptual flaws. Course provides an overview of ways of "doing" Indian studies from an American Indian Studies paradigm(s) through a critical examination of some of the most significant works emanating from this growing body of literature. Critiques paradigms that selected scholars have employed in the researching and writing of their topics. Seminar format allows students to take the lead in discussing each week's readings. Covers a range of scholarship dealing with American Indian issues; explores the development of American Indian Studies as an academic discipline; probes paradigms that Indigenous scholars have developed; and considers how those paradigms differ from those used by other disciplines. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 502 | American Indian Studies Research Methods | Prepares students for thesis research, writing, and completion. Surveys graduate research methods in the field of American Indian Studies including historical, interpretive, and narrative approaches. Focuses on methodological issues specific but not limited to American Indian and Indigenous Studies. Focuses on Indian-centered methodological approaches to research that are essential to qualitative writing of the various topics in Indian country and other issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 503 | Contemporary Issues of American Indian Nations | Provides an overview of the current status of American Indian Nations with regard to sovereignty, policy, politics, economy, and society. An exploration of current issues illustrates the unique challenges and innovative solutions put forth by Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 504 | American Indian Film and Activism | Examines the American Indian film and activism with emphases on American Indian production, directing, editing, investigative journalism, documentary film, entertainment, and research. Exposes students to the development of activism in film and how film has been utilized to educate, inspire, and contribute to the challenges in Indian Country. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 505 | Contemporary Visual Arts of American Indians | Focuses on a critical analysis of art, film, and media as they intersect with shaping the image and sustaining the culture of American Indians in North America. Examines the persistent and inappropriate stereotypes of American Indians as portrayed in film and media, including explanations for the persistence of negative stereotypes drawing on various aspects of critical race theory including power, politics, and race. Also introduces the scope and diversity of American Indian art and artists and highlights how native artists portray their views and culture through contemporary image making and representations. Stresses the interplay of art with sovereignty, identity, and politics. Emphasizes the powerful and significant connection between contemporary American Indian art and the persistence of indigenous cultures. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 506 | Indigenous American Literature and the Tribal Community | Teaches Indigenous (Indian, Native American, First Nations) literature's role in Indigenous history, cultural history, philosophy, society, culture, and developing cultural traditions. Students learn how tribal communities articulate themselves intellectually and artistically through literature and its development locally, nationally, and internationally. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 508 | Revitalizing Indigenous Languages | Critically examines Indigenous languages, their decline and revitalization from a language ecology and a self-determination perspective. Includes historical, sociopolitical, educational, linguistic, sociolinguistic, and cultural issues that have had and continue to impact Indigenous peoples and their languages worldwide and their reclamation efforts. Also examines various epistemologies, theories, ideologies, and practices of Indigenous people (including American Indian, Indigenous Alaskan, Hawaiian, Maori, Quechua). Topics include: language policy and planning, language acquisition, child language socialization, identity development, bilingual education, Indigenous language pedagogy, and current models and approaches for Indigenous language maintenance and revitalization (ILMR). | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 509 | American Indian and Indigenous Rights | Examines the rights of American Indian peoples with an emphasis on asserting indigenous rights in national as well as international forums. Challenges students to address issues related, but limited to: treaty rights, land rights, water rights, self-determination, rights to a distinct culture, religion, language, spiritual practices, customs, ceremonies, nationhood, autonomy, to seek redress and justice, rights to education, rights to protect from destruction and violence, rights to economic development, rights to protect lands from military, ecological, cultural, and environmental threats, and other rights that may affect the lives of American Indian people. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 510 | Social Change in American Indian Communities | Committed to the preservation of political autonomy and cultural identity, American Indian communities are increasingly gaining rule over the effects of social change impinged upon them. Recapturing their histories and redefining colonial relationships, they are forging a preferred future grounded in their own traditional institutions of community, religions, and strengthening of self-determination. Provides students with: (1) an understanding of the enduring struggle of American Indian communities to resist the movement of collective assimilation and retain the right of self-determination; (2) an examination over time of social changes in American Indian communities' social structures and their political and social movements towards the establishment of environmental, economic, and social justice; and (3) knowledge of strategies and tactic for achieving social change within American Indian communities that support Indian self-determination and self-governance. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 511 | Genders and Sexualities in American Indian Societies | Grounds students in the theory and concepts of American Indian genders and sexualities. In American Indian societies, there were more than two genders. With colonization through laws, boarding schools, and loss of culture, language, and land, these different genders were attacked and made to disappear. Examine the concepts of gender and sexuality from Native perspectives and theory, and through western imperial views. Also covers the ways in which decolonization plays a role in understanding indigenous genders and sexualities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 512 | Historical Trauma, Healing, and Decolonization | In recent years, scholars have begun to explore the prevalence of historical trauma among American Indian communities. This research argues that the genocide, violence, breakdown of customary cultures through external coercion; and oppression that Indians continue to face at the hands of foreign colonizers has left Indians with harmed with intergenerational self-destructive behavior, domestic violence, suicide, anxiety, depression, low self-esteem, and anger. As a result of this violence and oppression, they have developed models of recovering healthy nations while challenging violations of their human rights in the domestic and international arenas. This history has given rise to a widespread cultural revitalization movement often referred to as decolonization. Scholars from an array of academic disciplines are producing a growing body of literature about decolonization. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 513 | Urban Indian Issues | According to the 2010 Census, 64.1% of the American Indian/Alaskan Native population resides in a place outside of tribal areas. Cities such as Los Angeles, New York, and Phoenix have historically counted more than 25,000 American Indian residents. What draws Indigenous families to urban areas? How does an urban address impact the federal trust relationship with nonreservation Indians? What are the social, political, and economic implications for a family who lives off the reservation and away from tribal homeland? Course explores these issues and dynamics and challenges the student to examine the unique identity and contributions of urban Indians. Students learn the history of Indigenous migrations to the city and assess current needs and concerns through consultation work coordinated with Phoenix area Indian Centers and nonprofit organizations. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 514 | American Indian Intellectuals | Does it make sense to speak about American Indian "intellectuals," "thinkers," or "philosophers"? Not only have Indians been thinking and thinking deeply for generations, but they have produced a body of written works that have formed the foundation of contemporary American Indian studies. Course covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 515 | The Work and Legacy of Vine Deloria, Jr | Vine Deloria, Jr. Standing Rock Sioux (1933-2005) has often been referred to as "Uncle Vine" for his role in the intellectual development of innumerable scholars, as well as legal and political figures, all of whom have striven along side Deloria at making the world a better and more just place for indigenous communities. As such, Deloria has also been labeled "the Dean of American Indian Studies" because of his work at shaping the intellectual and political agenda, which began in 1969 with the seminal publication of <i>Custer Died for Your Sins: An Indian Manifesto</i> and continued posthumously with works on the medicine man traditions throughout North America and a reflection on Carl Gustav Jung's analyses of American Indian customs and beliefs. This seminar, the first of its kind, takes a comprehensive look at Deloria's philosophical and legalistic legacy by examining his major works and analyzing, in addition to critiquing, the ideas and opinions that shaped his intellectual career. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 516 | Concepts of Power and Indigeneity | Grounds students in the theory and concepts of power and indigeneity with comparisons with global Indigenous peoples and experiences. Through that theoretical understanding, examines and understands ways in which these concepts impact Indigenous communities and formulates ways in which to develop practical ways to address these issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 517 | Customary Tribal Law and Governance | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on customary law, justice, and government. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 518 | Tribal Jurisdiction | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on customary law, justice, and government. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 519 | Burial Rights, Repatriation, and Sacred Places Matters | Probes U.S. laws and policies, court cases, and Indian struggles for dignity, burial rights, repatriation, and religious freedom from the late 1800s to the present. Examines developments in the United Nations and international arena pertaining to Indigenous human rights, religious freedom, repatriation, and sacred places protection. U.S. policies, laws, practices, court decisions, land developers, pot hunters, and archaeologists have restricted the human rights of American Indians in terms of burial rights and religious freedom. Congress has enacted cultural resource and environmental protection laws, religious freedom, and reburial laws that aim to regulate the use and abuse of cultural resources and Indian rights. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 521 | American Indian Leadership and Resistance | Examines the modern leadership struggles in American Indian communities with a foundation of traditional concepts of leadership. Topics include leadership qualities and systems pre-contact, federal-tribal relations, state-tribal relations, tribal politics, internal disputes, activism, mobilization, cultural continuity, social change, community leadership, political/elected leadership, diplomacy, political agendas, and other topics related to American Indian leadership and resistance. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 522 | Tribal Governance | Explores American Indian leadership, political ideology, and the history and current state of tribal government. What makes tribal governments tick? Examines past and present challenges faced by leaders and members of indigenous communities. Brainstorms potential strategies for the further enhancement, protection, and assertion of this indigenous "brand" of governance. How do politics, policy development and the ever-changing face of indigenous sovereignty impact the way we think about governance? How can we educate and inspire tribal communities to have greater ownership and interest in government? Students engage with the current research, debate the issues, and learn from people who provide governance to indigenous communities. Case studies focus on specific issues in local communities. Individual portfolio project work facilitates learning and the articulation of leadership and governance as practiced by one particular tribe of your choice. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 523 | Community Development with American Indian Communities | Tribal community development is more complicated than large urban population centers or even rural communities because tribal communities continue to struggle with years of colonial, paternalistic, and assimilationist federal policies that have impeded their efforts to become self-determined and self-governing nations. Provides students with the knowledge and skills they need to support community development in American Indian communities within a self-determined and self-governing context. Content includes: (1) a framework for review of current economic, political, social, and cultural issues facing American Indian communities; (2) an overview of community development theories, of the underlying values behind those ideas, and of the linkages between theory and practice in American Indian and other Indigenous communities; and (3) a sampling of intervention strategies and tactics for effective community development in American Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 524 | Indian Control of Indian Education: Tribal Colleges and Universities | Examines American Indian control of education from a tribal college and university perspective. Focuses on the tribal college movement, including the historical and contemporary political, policy, research, and best practices that have influenced and sustained tribal colleges and universities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| ALA | 100 | Introduction to Environmental Design | Surveys environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Credit is allowed for only ALA or PUP 100 |
| ALA | 102 | Landscapes and Sustainability | Surveys ideas relating to landscapes and sustainability and the role of landscape architecture in the creation of humanized environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| ALA | 121 | Design Fundamentals I | Development of visual literacy. Introduces drawing and graphic representation as methods of seeing and problem solving. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major |
| ALA | 122 | Design Fundamentals II | Exercises in basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): ALA 121 with C or better; Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 124 |
| ALA | 124 | Design Fundamentals II Lecture | Theory and applications of basic design principles, history and theory of how architecture and landscape architecture design is impacted by basic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 122 |
| ALA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALA | 225 | Design Fundamentals III | Applies history and theory of design fundamentals with an emphasis on architectural and landscape architectural design issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: Architecture or Landscape Architecture student; ALA 122 with C or better; Passed milestone, Co-requisite: ALA 235 |
| ALA | 226 | Design Fundamentals IV | Basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: ALA 225 with C or better |
| ALA | 235 | Introduction to Computer Modeling | Fundamentals of computer operation, geographic information systems, geometric modeling of 3-D forms and rendering of light, mathematical modeling of processes using spreadsheets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major. Corequisite(s): ALA 225 (or EDS 200) |
| ALA | 240 | Sustainable Design in Built Environment | Reviews the physical principles used in the design of sustainable buildings, landscapes, and urban environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| ALA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALD | 101 | Introduction to Aging Issues | Introduces students to general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in midlife and beyond, living options, caregiving, and retirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | |
| ALD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 202 | Field Placement I | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |

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| ALD | 203 | Field Placement II | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202 |
| ALD | 204 | Field Placement III | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202; ALD 203 |
| ALD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 301 | Research Methods in Aging | Examines social science approaches to the study of aging. Includes particular methodological issues that must be considered when studying older adults. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |
| ALD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 404 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 420 | Health Issues and Older Adults | Analyzes and synthesizes the biological, social, and behavioral aspects of health and healthcare delivery in the later adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 420, 520 or FAS 421 |
| ALD | 431 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 431, 531 or FAS 421 |
| ALD | 440 | Social Policy and Aging | Critical analysis and evaluation of the historical, socio-political, and economic issues that are specific to older Americans. Includes federal, state, and local policy issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 460 | Alzheimer's and Related Dementias | In-depth analysis of Alzheimer's disease and related dementias from a caregiver's perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | |
| ALD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ALD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-7 | L | |
| ALD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 505 | Perspectives on Aging and the Life Course | Overview of general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in mid-life and beyond, living options, caregiving, and retirement. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 520 | Health Aspects of Aging Adults | Examines biological, social, and behavioral aspects of health in the later years, and the organization and delivery of care. Includes an emphasis on wellness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); ALD 505 with a grade of C or better, or co-enrolled. Credit is allowed for only ALD 420 or 520 |
| ALD | 525 | Mental Health in Midlife and Beyond | Focuses on the psychological, emotional, and cognitive changes as individuals age. Includes assessment and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 531 | Caregiving Issues for Families and Professionals | Examines the issues of caregiving by family members, in-home aids, and professionals in care facilities. Focuses on issues related to providing care to older adults in a variety of settings. Includes social policy toward caregiving, caregiver stress and reward, the role of social workers, and cultural concerns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre/Co-requisites: ALD 505 with C or better if completed; Credit is allowed for only ALD 431, 531 or FAS 421 |
| ALD | 535 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | REC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 540 | Public Policy Issues and Aging | Examines in detail the historical, socio-political, and economic issues that are specific to older Americans at the federal, state, and local levels. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 545 | Elder Abuse and Neglect | Provides a comprehensive review of crimes against older adults. Includes all types of abuse and neglect, as well as prevention, intervention, and public policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 560 | Dementia | Thorough examination of dementia and dementia syndromes, including Alzheimer's disease. Includes the complexity and diversity of behaviors that define dementia, and implications for planning interventions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ALD 460 or 560 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ALD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | LEC | Y | Z2 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 360 | Renewable Energy Technologies: Fundamentals and Integration | Technical fundamentals, economic, and social aspects of renewable energy technologies with emphasis on solar cells, hydrogen economy, and fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MAT 266; PHY 112; CHM 113 |
| ALT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 401 | Hydrogen Generation, Storage, and Distribution | Overview of primary technologies, economic aspects, and social policy issues related to development of hydrogen systems and hydrogen economy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): ALT 360. Credit is allowed for only ALT 401 or ALT 501 |
| ALT | 405 | Power Conditioning | Fundamentals of power electronics; DC-DC converters and DC-AC inverters; battery charge controllers. Lab experience. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only ALT 405 or 505 |
| ALT | 410 | Solar Cells and Module | Basic device physics and engineering of solar cells. Lab experience on fabrication, characterization, and testing of solar cells and module. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331 |
| ALT | 412 | Village Energy Systems | The role of energy resources in economic development. The need for and use of energy at the Base of the Economic Pyramid (BoP). Individual Problem Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Senior Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum. Credit is allowed for only ALT 412 or ALT 494 (Village Energy Systems) |
| ALT | 420 | Electrochemical Energy Technologies | Thermodynamic and electrochemical principles of fuel cells. Hands-on experience on fabrication and testing of fuel cells; problem solving skills. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: CHM 113; ALT 360 |
| ALT | 435 | Applied Photovoltaics | Overview of solar radiation, operating principles of photovoltaics, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; ALT 410 (not required for BAS students); Credit is allowed for only ALT 435 or 535 |
| ALT | 445 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; CHM 113; Credit is allowed for only ALT 445 or 545 |
| ALT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 502 | Batteries for Portable Electronics | Theoretical and practical overview of primary, secondary, and lithium batteries. Key performance characteristics, construction materials, typical applications, recycling, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 503 | Fuel Cells for Portable Electronics | Overview of electrochemistry, portable electronics industry, principles of fuel cells, and prospects for micro fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 505 | Power Conditioning | Fundamentals of power electronics, DC-DC converters and DC-AC inverters, battery charge controllers. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only ALT 405 or 505 |
| ALT | 507 | Evaluations of Photovoltaic and Fuel Cell Systems | Field testing, data collection, and evaluation of real-world photovoltaic and fuel cell systems available on campus and data analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ALT | 512 | Village Energy Systems | Establishes leadership in the development of energy resources at the Base of the Economic Pyramid (BoP). Individual Problem-Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum; Credit allowed for only ALT 512 or ALT 598 (Village Energy Systems) |
| ALT | 515 | Alternative Energy Reliability and Standards | Alternative energy systems and their reliability issues, accelerated life and safety testing, standards and codes, regulatory requirements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 535 | Applied Photovoltaics | Term projects, overview of solar radiation, operating principles, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only ALT 435 or 535 |
| ALT | 545 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status. Credit is allowed for only ALT 445 or 545 |
| ALT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 101 | ASU Digital Culture Experience | Orientation to the Digital Culture program with emphasis on resources for academic success. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): Herberger Institute for Design and the Arts Digital Culture BA major; Credit is allowed for only AME 101 or AME 194 (ASU Digital Culture Experience) |
| AME | 111 | Introduction to Digital Culture | Examines the effects of digital technology on the way we live, communicate, learn, and create. Proposes that we are moving towards a hybrid (physical-digital) existence and culture. Traces that evolution, looks at current examples of hybrid cultural processes and outcomes, and discusses possible future trends. Discusses how these changes are influencing the work and career possibilities of people involved in all aspects of human culture. Comprises diverse readings, media products, class interaction, group discussion and hands-on collaborative projects exploring concepts covered in class. Also includes a number of guest lectures from ASU faculty. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | CS | Credit is allowed for only AME 111 or 194 (Introduction to Digital Culture) |
| AME | 112 | Computational Thinking for Digital Culture | Introduces fundamental concepts relevant for understanding computation. What are algorithms and how can computer code express them? Basics of how real-world signals are captured, encoded, recorded, retrieved and decoded. Designed for students with little or no background in programming. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 112 or 194 (Computational Thinking for Digital Culture) |
| AME | 120 | Digital Culture Studio | Provides advice on career preparation and industry skills through a series of guest lectures. Sample topics include resumes, personal Websites and portfolios, how to pitch a project idea, and topics chosen by guest industry presenters. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Credit is allowed for only AME 120 or AME 194 (Digital Culture Studio) |
| AME | 130 | Prototyping Dreams | How do you build your dreams? Explores the idea of inspirational prototyping across multiple media, including physical fabrication, science fiction, virtual worlds and film. Students create and iterate their own prototypes for visions of the future: new technologies, solutions to challenges, and tools or systems that expand the horizon of human potential. These prototypes do not have to be functional tools, but they must be functional stories, effectively sharing the creator's vision with others. Just as the Star Trek communicator inspired early cellphones, these prototypes will help shape new conversations about the future we want to build. Surveys a series of creative paradigms for inspirational prototyping, including design fiction, rapid fabrication and 3D printing, science fiction prototyping, gaming and virtual world-building. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 130 or AME 194 (Prototyping Dreams) |
| AME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 220 | Programming for the Web | Introduces a range of technologies used for Web development: marking up content with HTML, styling with CSS and interaction using Javascript. Explores the latest foundational Web standards such as HTML5 and CSS3 to learn how to create compelling content for the World Wide Web. Goes beyond simply coding a Web page to understanding how the Web works. The World Wide Web is used in an incredible variety of applications that we now find integral to our lives, from talking to our friends on Facebook to discovering music on the iTunes Music Store, paying bills from our bank's Web site to finding the route to our vacation destination on Google maps. Investigates how Web standards have enabled the creation of dynamic applications delivered over the Internet. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 220 or AME 294 (Programming for the Web) |
| AME | 230 | Programming for the Media Arts | Introductory-level course in practical aspects of programming systems for media arts. Explores techniques in programming in the context of images, sounds, interaction, networking and data visualization. Uses the processing programming language, an accessible yet powerful environment for learning how to program. Students create images, animations and interactive programs, and learn how to use images, movies, sound files, microphones and cameras in their programs. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 230 or AME 294 (Programming for Media Arts) |

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| AME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 310 | Media Literacies and Composition | When we integrate computational systems into the core of our cultural and social practices, we reinvent how we tell stories. The roles of creators, critics and audiences are blurring at the same time that digital tools allow us to infinitely reproduce and remix narratives, radically changing what we mean by the "work" or "text." These new media platforms empower us to create, share and respond to cultural narratives that defy traditional notions of how stories operate, demanding new literacies. Explores our powers and responsibilities as readers, writers and creators of new cultural languages, including new forms such as games, digital video, electronic literature and social media. Students study relevant media narratives and cultural ecosystems from the 20th and 21st centuries, acquiring a set of literacies that they hone through practices of authorship, critique and collaboration, culminating in the presentation of their own digital media narratives. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 310 or AME 394 (Media Literacies & Composition) |
| AME | 320 | Motion Capture for Integrative Systems | Presents the broad principles and techniques for movement study in oneself and others that includes applied, dynamic anatomy. Also presents the functional techniques for motion capture with a special emphasis on the capture of human movement from visual sensors. Students understand the technology behind motion capture; a high-level understanding of movement and anatomical systems; the ability to perform motion capture and customize it to suit the requirements of specific creative applications in animation, sound and live performance as well as applications in movement rehabilitation and education. Looks at the technology behind various modern motion capture systems based on markers, inertial sensors, accelerometers, and depth sensors, so the student appreciates the technical capabilities and limitations of each technique. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 320 or AME 394 (Motion Capture for Integrative Systems) |
| AME | 340 | Compositional and Computational Principles for Media Arts | In much of today's contemporary art practice there is a tight coupling of compositional form, content and underlying computational mechanisms. This integration holds the potential to yield new modes of expression and wholly new art experiences as is evident in emerging forms of real-time generative art, network-based art, game-based art, and interactive performance. As both practitioners and participants, we must develop a critical understanding of the relevant compositional and computational principles that frame this work. Students study relevant media art works from the 20th and 21st century, develop a working understanding of fundamental compositional and computational principles, and apply their understanding through the realization of exploratory media artworks that are presented at the end of the semester. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 340 or AME 394 (Compositional & Computational Principles for Media) |
| AME | 385 | Collaborative Projects and Research I | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major; Minimum 45 earned hours; Credit is allowed for only AME 385 or 394 (Collaborative Projects & Research I) |
| AME | 386 | Collaborative Projects and Research II | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 385; Credit is allowed for only AME 386 or 394 (Collaborative Projects & Research II) |
| AME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | |
| AME | 485 | Digital Culture Capstone I | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major or minor or certificate; minimum 45 hours. Credit is allowed for only AME 485 or AME 494 (Digital Culture Capstone I) |

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| AME | 486 | Digital Culture Capstone II | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 485; Credit is allowed for only AME 486 or 494 (Digital Culture Capstone II) |
| AME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | | Prerequisite(s): Barrett Honors student |
| AME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-7 | L | |
| AME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-3 | | |
| AME | 530 | Experiential Media Methodology and Theory I | Engages students in the theory and practice of designing and evaluating experiential media systems. Building on ideas and concepts explored in the companion introductory course, students create and critique a variety of integrated media systems demonstrating technical competence, aesthetic knowledge, analytic rigor and theoretical relevance. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only AME 530 or 598 (Experiential Media Methodology and Theory I) |
| AME | 531 | Experiential Media Methodology and Theory II | Focuses on media arts and sciences in the 20th and 21st century, discussing issues surrounding the definition of the field, media art creation practices, methods of criticism and analysis, interdisciplinary/transdisciplinary work and research, collaboration and current trends. Also focuses on the methodology, theory and history behind the design and development of experiential media systems. Directed toward those interested in researching, designing, building or critiquing experiential media systems that are culturally provocative, socially meaningful and deeply essential. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): AME 530; credit is allowed for only AME 531 or 598 (Experiential Media Methodology and Theory II) |
| AME | 532 | Creating by Algorithm | Focuses on creation of media of all kinds using computation. Using algorithms it is possible to create complex media that is difficult or impossible by traditional methods. Some techniques can capture the unpredictable evolutionary and emergent behavior found in nature. Investigates influential algorithmic methods including stochastic processes and Markov chains, Perlin noise, cellular automata, fractals, L-systems and genetic algorithms. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 533 | Realtime Data Analysis and Pattern Recognition for Interaction | Real-time computing is increasingly used in a variety of settings and scenarios--no more so than in mobile computing. Embedded within our mobile devices are a multitude of onboard sensors, including a three-axis accelerometer, magnetometers, microphones, cameras and GPS. Explores, through the frame of mobile computing, the foundations of employing real-time sensor, visual or audio signals to deliver novel media applications. Introduces computational techniques for classification, detection and recognition of these diverse signal sources through practical example and relevant literature, including signal smoothing, feature extraction, clustering, pattern recognition, neural networks and content classification. Introduces the technical possibilities for such systems as well as the considerations involved in designing and developing real-time solutions. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 541 | Interactive Forms | This course explores how computational models can enhance the form, meaning, and engagement of interactive mediated experiences. Special emphasis is given on how new computational models (stochastic procedures, non-linear dynamics) can be used to mediate the complexity of our current experiences. | N | LEC | N | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 590 | Reading And Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 100 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | MA | Pre-requisites: MAT 117 with C or better or MAT 194: EFM (with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| AML | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 253 | Introduction to Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| AML | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 330 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisites: AML 100 or MAT 142, 170, 210, 265 or 270 with C or better OR Mathematics Placement Test score of 50% or higher; Minimum 56 hours. Credit for only ASB 430, CPI 430, or AML 330 |
| AML | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 406 | Directed Reading and Research in Applied Mathematics for the Life and Social Sciences | Collaborative, practice-oriented course where students produce individual or team-initiated research project reports on pertinent topics in the life and social sciences. Students select topics, design, identify and formulate effective research ideas, and then translate them into clear and effective research plans. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: AML 100 and MAT 342 (or MAT 343); 86 minimum hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AML | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210(or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| AML | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| AML | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AML | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | L | |
| AML | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only AML, ESS or SOS 540 |
| AML | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| AML | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AML | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 610 | Topics in Applied Mathematics for the Life and Social Sciences | Introductory course in applied mathematics for the life and social sciences, combined with the first semester of a two-semester course in mathematical biology. Provides a solid introduction to the modeling of biological and social processes as well as to some of the mathematical approaches involved in their analysis and simulation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 612 | Applied Mathematics for the Life and Social Sciences Modeling Seminar | Presents and applies mathematical modeling principles and techniques for representing the structure and operation of complex life and social systems and processes. Helps students identify potential problems in the life and social sciences and the corresponding mathematical and statistical methods that can be used for their study. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AML | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 502 | American Studies: Theory and Method | Explores some of the major themes in American studies scholarship by considering American cultural formation and change over the last two centuries. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): MA American Studies major |
| AMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| AMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 201 | American Style | Provides an intellectual foundation for the interdisciplinary study of American culture, history, and society. Introduces students to ideas, methods, tools, and theories in the vibrant field of American studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| AMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 310 | History of American Systems to 1865 | First of a two-part survey of political, legal, and economic institutions, placed in the context of the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| AMS | 311 | History of American Systems Since 1865 | Second in a two-part survey of political, legal, and economic institutions, placed in the context of a dynamic industrialist capitalist society, from the age of industrialism and modern America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| AMS | 320 | American Cultural History I | First of a two-part survey of American culture, broadly defined as historically transmitted patterns of meaning expressed in symbolic forms, including ideas, ideals, the arts, and social and economic standards from the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| AMS | 326 | Popular Culture | Topics in American popular culture, including theories of popular culture; the history and analysis of mass media, including television, film, and the music industry; and vernacular art and the folk tradition. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 327 | Regional Cultures | Examines the concept of regionalism and regional cultures in America with a special emphasis on the Southwest/Borderlands. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 330 | Documenting American Lives | Examines American society through the study of autobiography and ethnography. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Pre-requisites: Minimum 45 hours |
| AMS | 332 | Studies in Race and Ethnicity | Topics relating to issues of race and ethnicity in American life. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 334 | American Class | Explores social class and inequality in the U.S. including history, culture, work, politics, globalization, and intersections of gender, race, ethnicity, and place. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum sophomore standing |
| AMS | 335 | American Biography | Topics in biographies of individuals, comparative biographies, the art of biography, and the function of autobiography. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| AMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 412 | Studies in American Politics & Law | Topics in American political and legal systems, including social movements in the United States and women and the law. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

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| AMS | 417 | Religious Traditions of the American Southwest | Examines the sacred traditions that have evolved within the North American Southwest context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| AMS | 422 | Studies in American Literature | Topics in American literature, including contemporary American comic fiction, literature of the American South, literature of American wars, Hispanic chronicles of the Southwest, literature of la Chicana, and American rhetoric. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 428 | Chicano Cultures in the Southwest | Examines and explores Chicana and Chicano culture as place and sentiment. The physical place and space and the sentiment related to Chicanas and Chicanos. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Credit is allowed for only MAS 598 (Chicano Cultures) or AMS 428 |
| AMS | 429 | Interdisciplinary Topics | Senior-level seminar that examines issues relevant to two or more American cultures' fields. Topics may include Southwest/border Hispanic folklore, Southwestern corridors, American art and the city, and the West of the imagination. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 431 | Gender Studies | Topics relating to issues of gender in American life. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 490 | Writing Certificate Portfolio | Preparing a portfolio demonstrating advanced writing skills. Limited to and required of students in the Writing Certificate Program. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | |
| AMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 101 or 105 with C or better; AMS 301 with C or better |
| AMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 101 | Introduction to Aeronautical Management Technology | Facilitates entry into aeronautical management technology programs. Emphasizes General Catalog; major and concentration requirements, registration, careers, and Polytechnic campus resources. Introduces various learning styles and strategies that assist students in becoming successful learners. Emphasizes time management techniques and academic integrity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | |

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| AMT | 105 | Flight Operations and Safety I | Supervised private pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for private pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and FAA Practical Exam(s) within the appropriate flight training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students following the single engine flight training track earn their Single Engine Private Pilot certificate. Students following the multiengine flight training track earn their Single Engine Private Pilot Certificate and their Multiengine Private Pilot certificate. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Professional flight program secondary application; Pre- or corequisite(s): AMT 182 and AMT 220 with C or better if completed |
| AMT | 110 | Flight Operations & Safety II | Concludes supervised private pilot operations and flight training and introduces students to supervised commercial pilot operations, flight training, flight safety briefings, and recurrent aviation subjects appropriate for private and commercial pilots. Flight instruction costs are not included in university tuition and fees. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 105 with C or better; Pre- or corequisite(s): AMT 222 with C or better if completed |
| AMT | 150 | Flight Operations & Safety III | Continuation of supervised instrument pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for instrument pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and the FAA practical exam within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Instrument Rating. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 110 with C or better |
| AMT | 170 | Introduction to Unmanned Aircraft Systems | Introduces the history of unmanned aircraft systems and current and future developments in civil and military operations. Specific blocks deal with elements that form an unmanned aircraft system: unmanned vehicles, communication, navigation, launch and recovery, control stations, payloads, and support equipment. Explores other current issues in unmanned aircraft operations: aviation regulatory system and integration, safety and human factors, ethical and legal issues, and the future unmanned aircraft systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 182 | Private Pilot Ground School | Ground school preparation for Private Pilot Certificate. <u>Aerodynamics, navigation, performance, and regulations.</u> | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 201 | Air Traffic Control | Ground and air operations; weather services communications and routing; flight plans, IFR operations, departures and arrivals; and airport conditions and emergencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: BAS Applied Science (Aviation Management Technology) OR BS Aeronautical Management Technology OR BS Air Traffic Management major |
| AMT | 205 | Flight Operations and Safety IV | Continuing introduction to commercial pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight syllabus topics, student handbook/general operations manual, monthly safety and informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 150 with C or better |
| AMT | 210 | Flight Operations and Safety V | Covers instrument pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight topics, student handbooks, operations manual, monthly safety meetings, informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 205 with C or better |
| AMT | 214 | Commercial Pilot Ground School | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 1 of 2). 10 hours ground trainer included. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Aeronautical Management Technology major; AMT 182 and 220 with C or better |
| AMT | 220 | Aviation Meteorology | Evaluation, analysis, and interpretation of atmospheric phenomena. Low- and high-altitude weather from the pilot's viewpoint. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 222 | Instrument Pilot Ground School | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 2 of 2). 10 hours ground trainer included. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 105 and AMT 182 with C or better, OR nonmajor: AMT 182 with C or better |

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| AMT | 250 | Flight Operations and Safety VI | Continuing introduction to commercial pilot flight operations and begins to introduce the student to certified flight instructor flight operations. Primary activities include flight instruction, lecture and discussion of the current flight syllabus topics, handbooks and general operations manual as well as monthly safety and other informational briefings. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 210 with C or better |
| AMT | 270 | Unmanned Aircraft | Introduces elements comprising the unmanned aircraft system (UAS). Includes review of UAS, Unmanned Aerial Vehicle (UAV), system development and certification, selection and design, aerodynamics and airframe configurations, characteristics of vehicle types, design standards and regulatory aspects, airframe design, payload types, and control and stability. Students apply concepts acquired in classroom sessions and construct various unmanned aircraft, train to operate using existing simulators, and conduct flight-testing. The final course project is the design, development and construction of a group 1 unmanned aircraft, serving as the core unmanned vehicle used in subsequent UAS courses. Incorporates UAS data collection and analysis throughout the course. Course concepts enable UAS student pilots to become knowledgeable of aerodynamic aspects of UAV to ensure safety of flight and improved maneuverability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 170 with C or better |
| AMT | 280 | Aerospace Structures, Materials and Systems | Basic aerodynamics, incompressible/compressible airflow, wind tunnel testing, wing theory; analysis of aircraft structures; properties and applications of materials, and aircraft systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre- or corequisite(s): PHY 111, 113 |
| AMT | 285 | Flight Instructor Ground School | Ground school in preparation for the FAA Flight Instructor Certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s) with C or better: AMT 150, 214 |
| AMT | 286 | Multiengine Pilot Ground School | Ground school preparation for the FAA Multiengine Rating. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre- or corequisite(s): AMT 150 with C or better if completed; Aeronautical Management Technology (Professional Flight) major |
| AMT | 287 | Aircraft Powerplants | Theory and performance analysis of gas turbine and reciprocating aircraft engines. Engine accessories, systems, and environmental control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre/Co-requisite: PHY 111 or PHY 121 |
| AMT | 292 | Flight Instructor Instrument Ground School | Ground school preparation for the FAA Instrument Flight Instructor Rating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 205 and 222 with C or better; AMT 285 or 385 with C or better |
| AMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 305 | Commercial Pilot Operations and Safety | Continuation of supervised multiengine commercial pilot operations, introduction of single engine commercial pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for commercial pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Commercial Multiengine and Commercial Single Engine certificates. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre-requisites: Aeronautical Management Technology Professional Flight major; AMT 250 with C or better |
| AMT | 308 | Air Transportation | Studies the historical and international development of air transportation and its social, political, and economic impact upon global interrelationships. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | G | Pre-requisite: Minimum 50 hours |
| AMT | 310 | Flight Operations and Safety VIII | Covers certified flight instructor instrument (CFII) and multiengine flight operations. Flight instruction, lecture and discussion of the current flight topics, student information handbooks, general operations manual (GOM), monthly safety, informational briefings. Requires enrollment in appropriate flight operations and safety course while engaging in flight training activities. Flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 286 and 305 with C or better. Pre- or corequisite(s): AMT 292 (or AMT 392) with C or better if completed |
| AMT | 350 | Aircraft Design and Logistics Management | Fundamental aircraft design principles, including performance factors associated with mission profiles and the identification of basic logistical support requirements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 280 with C or better; Pre/Co-requisite: AMT 287 with C or better if completed |
| AMT | 360 | Aircraft Dispatch Ground School | Aeronautical knowledge areas required for Aircraft Dispatch certification, as well as preparation for the Aircraft Dispatch knowledge examination. Regulations, aerodynamics, emergencies, flight physiology, weight and balance, navigation, aircraft performance, meteorology, and flight operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 214; AMT 220; AMT 222; Credit is allowed for only AMT 360 or AMT 394 (Airline Dispatcher Ground School) |

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| AMT | 370 | Unmanned Aircraft Systems | Students build upon gained knowledge, skills and experience by exploring unmanned aircraft avionics, autopilot systems, first person video (FPV), on-screen displays (OSD), communication systems, command and control (C2), ground control stations (GCS), flight software, and UAV launch and recovery systems. Students continue flight training and gain proficiency in unmanned aircraft operation using simulators and hands-on flight-testing. Students demonstrate their abilities to upgrade and modify their previously constructed unmanned aircraft in order to operate and conduct actual flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 270 with C or better |
| AMT | 382 | Air Navigation | Theory and application of modern advanced navigation and flight instrument systems. Introduces crew resource management in multiplace cockpits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 250 with C or better; Minimum 64 hours |
| AMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 396 | Aviation Professional | Career focus for management and flight students, including internships, writing, interviews, and employment search in aviation industry. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): BAS or BS aviation program major; junior standing |
| AMT | 408 | National Aviation Policy | Examines aviation and airspace policies and policy process, including agencies involved in formulation, implementation, and evaluation of aviation policy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 410 | Aviation Safety and Human Factors | Aviation accident prevention, human factors, life support, fire prevention, accident investigation, and crash survivability. Development and analysis of aviation safety programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 182 with C or better; AMT 308 with C or better |
| AMT | 442 | Aviation Law and Regulations | Aviation within context of U.S. Common Law system. Public law, administrative rule making, sovereignty, enforcement, and case law analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 308 with C or better |
| AMT | 444 | Airport Management and Planning | Orientation to administration and management of modern public airports, including overview of planning, funding, and development of airport facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 456 | Introduction to Organized Labor | Introduces labor relations, unions, federations, collective bargaining, grievances, and labor legislation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| AMT | 470 | Unmanned Aircraft Payloads, Sensors, and Control Stations | Builds on previously gained knowledge and experience. Student pilots utilize long-range communication and data links, UAS sensors, geospatial data collection, and still-imaging mosaicking. Students continue flight training using existing simulators and flight-tests during the course. Students apply concepts acquired during classroom sessions and construct a ground control station, modify and upgrade existing unmanned aircraft with payloads/sensors, train to operate sensors using existing simulators, and conduct flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 370 with C or better |
| AMT | 482 | Airline Instrument Procedures | Advanced instrument flight using airline instrument procedures and airline crew and cockpit resource management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 382 with C or better |
| AMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): AMT 308 with C or better; junior standing |
| AMT | 486 | Regional Jet Aircraft Systems | Regional jet airline aircraft systems and flight procedures. Includes theoretical education for regional jet commercial passenger aircraft. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 382 with C or better; Aeronautical Management Technology (Professional Flight) student |
| AMT | 488 | Regional Jet Aircraft Systems II | Regional jet systems, with emphasis on air navigation systems, including Flight Management System (FMS), Selective Calling (SELCAL), and flight profiles. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: Aeronautical Management Technology (Professional Flight) student; AMT 382 with C or better |
| AMT | 489 | Airline Administration | Administrative organizations, economics of airline administration, operational structure, and relationship with federal government agencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Minimum Junior status; AMT 308 with C or better |
| AMT | 490 | Regional Jet Operations Capstone | Regional jet aircraft operations and flight procedures. Includes theoretical education for RJ aircraft, FTD and full-motion simulator time. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s) with C or better: AMT 205, 482, 486, 488; Aeronautical Management Technology (Professional Flight) major |
| AMT | 491 | Aviation Management Capstone | Integrated group project with industry partner to address current problems in either air carrier or airport management focus area. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): junior standing. Pre- or corequisite(s): AMT 489 with C or better if completed |
| AMT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Pre-requisite: Minimum 2.25 GPA |

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| AMT | 495 | Unmanned Aircraft Systems Operations | Capstone course applies student pilots' knowledge and skills gained in previous UAS courses to safely deploy a UAS in response to real-world situation or research. Students collaborate with other university departments, state or federal agencies, and other organizations and conduct actual or simulated missions in geospatial data collection, search and rescue, and near-space operations. Course blocks include flight planning and preparation, aircraft preflight and maintenance, launch and recovery operations, payload operations, normal and emergency procedures, and mission planning and execution. Students continue flight training using existing simulators and flight-tests. Students use real-world situations which require deployment of equipment and systems developed during previous course. Places specific emphasis on aircraft and payload selection based upon proposed mission analysis. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 470 |
| AMT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-7 | L | |
| AMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-3 | | |
| AMT | 522 | Aviation Law | Examines the U.S. legal system with a focus on the aviation perspective, administrative agencies, FAA enforcement, and case law. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 523 | Intermodal Transportation Management | Systems theory applied to intermodal transportation networks. Surveys air and ground transportation infrastructure, institutional frameworks, and intermediaries promoting connections between modes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Schools of Engineering with a University Cum GPA 3.0 or greater |
| AMT | 525 | Airport Planning and Design | Completion of various phases of airport master planning process. Provides guidance for logical and timely development of airports. Project work groups assigned. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 526 | Aviation Labor Relations | Investigates labor-management relations in the aviation industry, including laws, unionism, collective bargaining, public sector relationships, grievance procedures, and conflict. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 527 | Airline Management Strategies | Since deregulation, airlines have undergone profound changes through mergers, consolidation, and acquisition. In-depth look at airline management strategies for the 21st century. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 533 | Training Systems & Simulation | Provides an overview of simulation and its various uses in aviation instruction. Three main focus areas: simulation, learning and human performance, instruction and evaluation of instructional effectiveness. Focuses on research findings in these areas and practical application and implementation of simulation to improve learning and performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 534 | Airline Pricing and Yield Management | Focuses on the fundamentals of airline economics and the volatility of industry performance at the operating level. Topics include the structure of the airline industry and the various historical and current operational strategies; demand, traffic, price and yield; operating revenues and operating costs. The airline industry is affected by various economic, environmental, political and regulatory conditions. Reviews the implications of these conditions on airline pricing, capacity, fleet selection and scheduling. Analyzes current and predicted future conditions to develop potential strategies for successful revenue management within the industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: degree- or nondegree-seeking graduate student. Credit is allowed for only AMT 534 or AMT 598 (Airline Pricing and Yield Management) |
| AMT | 541 | Aviation Physiology | Surveys human physiology and human performance principles related to modern aircraft and aircraft systems operating in multiple environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 546 | Crew Resource Management/Line-Oriented Flight Training | Evaluates in-depth, multicrew coordination issues for commercial aviation pilots. Stresses importance of critical thinking, decision making, integrated resource utilization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 565 | Safety in Complex Systems | Evaluates human error in aerospace systems. Discusses different theories of error and taxonomies as well as safety management systems to help identify hazards and risks and then help mitigate and/or eliminate them. Extensively uses case studies to highlight human failures as well as demonstrate organizational changes that resulted in safe and successful operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AMT | 570 | Unmanned Aerial Systems | Examines the system design, operations and employment of unmanned aerial systems (UAS), beginning with an overview of the system and human factors and specific issues involved with UAS design and operations. Communication, remote operations, operator display interface, and situational awareness and teamwork required for successful employment. Evaluates accident data to understand technology and human error concerns. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| ANB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ANB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 601 | Research Strategies in Animal Behavior | Using hands-on experiences, teaches key concepts underlying the control and function of animal behaviors and contemporary methods for measuring, analyzing, and reporting animal behaviors. Combines introductory classroom lectures on concepts and methods with direct application in observations and experiments on animal behavior in the field and the lab. Topics include communication, mating behavior and systems, parental care, kin selection, cooperation and competition, migration and dispersal, foraging, and anti-predator strategies. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 602 | Current Issues In Animal Behavior | Student-led seminar course centers on discussions of contemporary literature in the field of animal behavior. Takes a student-driven approach, with course participants selecting a target theme for the semester, selecting individual papers to discuss each week, and leading discussions about relevant merits and shortcomings of each article. Additional topics may include: conceptual frameworks and results from the dissertation projects of participating students, career options and strategies in the behavioral sciences, responsible research conduct in the field, and tactics in manuscript publication and grantsmanship. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ANB | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 194 | Special Topics | | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ANP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ANP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ANP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| ANP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design (Energy Perform/Bldgs) MS, Building Design (Facilities Dev/Mgt) MS or Building Design (Knowledge/Compng) MS student |
| ANP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |
| ANP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |
| ANP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ANP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design Knowledge and Computing MS student; ANP 592 with a grade of Y |
| ANP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design Knowledge and Computing MS student |
| APA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisite: Freshman status |
| APA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 200 | Introduction to Asian Pacific American Studies | Examines historical and contemporary issues facing Asian Americans and Pacific Islanders in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | |
| APA | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| APA | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| APA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 310 | Asian Pacific American Arts and Cultures | In-depth exploration of Asian Pacific American cultural expression in art, literature, film, theatre, dance, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or minimum 30 hours. Credit is allowed for only APA 310 or FMS 310 |
| APA | 315 | Asian Pacific American Literature | In-depth exploration of the literary history, critical reception, and major theories in Asian Pacific American poetry, fiction, and prose. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or 210 or 30 minimum hours |
| APA | 330 | Asian Pacific American Genders and Sexualities | In-depth exploration of gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites:APA 200 or 210 or 30 minimum hours. Credit is allowed for only APA 330 or WST 331 |
| APA | 340 | Asian Pacific Americans and Media | Advanced study of the social construction of Asian Pacific American media images and resistance to those images in various historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| APA | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| APA | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| APA | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| APA | 356 | Race and Child Development | Reviews the current research and literature about the particular role of race in child development. Even though race is not a valid biological construct, it has significant social implications as it shapes how children interact and are treated by others. Through primarily class discussions/activities, presentations and papers, addresses: (1) What are the research and theoretical issues in studying race? (2) What does race and racism mean? (3) How does race influence developmental processes? | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or APA 210 or 30 hours. Credit is allowed for only APA 356 or CDE 356 or APA 394 (Race and Child Development) |
| APA | 360 | Asian Pacific American Experience | Advanced study of the historical and contemporary experiences of Asian Pacific American racial/ethnic groups in the United States. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| APA | 450 | Asian Pacific American Contemporary Issues | Advanced study of the issues shaping Asian Pacific American communities, including immigration, politics, education, health, family, gender, youth, interracial relations, and other contemporary topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |

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| APA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| APA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |
| APA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | |
| APA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| APA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 212 | Culture of Place | Explores contemporary conditions in the built environment as they are shaped by cultural phenomena. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| APH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 300 | World Architecture I/Western Cultures | Historical and contemporary built environments of Western civilizations: Mediterranean, Europe, and the Americas as manifestations of cultural history and responses to environmental determinants. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2-3 | HU & H & G | Pre-requisite: May not be Pre-Architectural Studies or Architectural Studies BSD student |
| APH | 305 | Contemporary Architecture | Europe and America from the foundations of the modern movement to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: Non-majors only (non-architecture students) |
| APH | 313 | History of Architecture I | Intensive study of history of architecture from earliest traces to 1300. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: Architectural Studies major with ALA 100 or ALA 102 and passed degree milestone review or non-majors with junior standing |
| APH | 314 | History of Architecture II | Intensive introduction to history of architecture from roughly 1300 to present day. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: APH 313 with C or better |
| APH | 336 | 20th-Century Architecture I | Architecture in Europe and America from the foundations of the modern movement to the culmination of the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites: Minimum Junior standing or Digital Culture: Design major |
| APH | 337 | 20th-Century Architecture II | Developments in architecture since the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisite: APH 336 |
| APH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 414 | History of the City | The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as analytical essays and an in-depth research paper are required in addition to regular tests and quizzes. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & H | Pre-requisites: PUP 301; Minimum 45 hours; Credit is allowed for only APH 414, MUD 598 (History of the City) or PUP 412 |
| APH | 421 | First Concepts: What is... The Writing, Philosophy, and Culture of Architecture | Examines the major writings and concepts that surround the history of architecture. Focuses on (but not exclusively) work in the 20th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L or HU | Pre-requisites: APH 313 & APH 314 with C or better; Architecture or Digital Culture Design student |
| APH | 441 | Ancient Arch | Architecture of the ancient Mediterranean world with selective emphasis on major historical complexes and monumental sites. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| APH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| APH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |

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| APH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| APH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 505 | Foundation Theory Seminar | Foundation of conceptual architectural inquiry, stressing the reciprocal and interdependent relationship between design and theory. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisites: ADE 522; ATE 556 |
| APH | 509 | Foundation Seminar | Historical, technical, theoretical, environmental, and professional issues in architecture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture; Co-requisite: ADE 510 |
| APH | 515 | Current Issues and Topics | Critical examination of current architectural issues, topics, and discourse. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: APH 505 with a C or better; Co-requisite: ADE 621 |
| APH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 581 | Contemporary Urban Design | Explores contemporary city and urban design issues related to contemporary cities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 555 | Disciplinary Discourses | Professional and disciplinary issues in linguistics and applied linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |

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| APL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SHS 588 or APL 588 |
| APL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 601 | Introduction to Applied Linguistics | Overview of the field of applied linguistics. Applies linguistic knowledge to the resolution of language-related issues facing multilingual societies (e.g., second language acquisition and ultimate attainment, literacy, language assessment, bilingualism, heritage and indigenous languages, language attitudes, language planning and policy, language and politics, world Englishes). | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 501 | Differential Equations I | Linear and nonlinear ordinary differential equations. Existence and uniqueness of solutions, limit sets, stability, Lyapunov functions, linear systems with constant coefficients. Geometry of behavior in two and three dimensions, including Poincare-Bendixson theorem, Lorenz equations, linearization, sensitive dependence on initial conditions, bifurcations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 502 | Differential Equations II | Partial differential equations, including classification, method of characteristics, separation of variables, boundary value and initial value problems, Green's functions, maximum principle, distributions, and weak solutions. Students must have already taken or be concurrently enrolled in Differential Equations 1. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 503 | Applied Analysis | Convergence sequences and series of functions; metric space topology, compactness, completeness and the Ascoli-Arzelà Theorem; Contraction Mapping Principle, Implicit Function Theorem; intro to Lebesgue integration leading to L^p -spaces; properties of Hilbert spaces, Fourier transform. Students should have knowledge of linear algebra, multivariable calculus, and analysis at the undergraduate level. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 504 | Applied Probability and Stochastic Processes | Markov chains, Martingales, probability measures, SDE, Brownian motion, Monte Carlo methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 505 | Applied Linear Algebra | Fundamentals of linear algebra and numerical linear algebra, including decompositions (LU, QR, SVD), Eigen values, spectral theory, least squares problems. Programming with MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 506 | Computational Methods | Covers interpolation, solution of nonlinear equations and systems, numerical differentiation, numerical integration, numerical solution of ordinary and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 520 | Advanced Numerical Linear Algebra | Extends topics of APM 505. Introduces essential iterative methods, Gauss-Seidel, conjugate gradients. Methods for SVD, total least squares and root-finding applications in image analysis. Students should have basic knowledge of numerical linear algebra and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 522 | Numerical Methods for Partial Differential Equations | Numerical methods for parabolic, elliptic, and hyperbolic partial differential equations, including finite difference/volume, finite element, and spectral methods. Mathematical concepts of stability, consistency, and convergence. Applications to scientific, biomedical, and industrial problems. Students should have a basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 523 | Optimization | Building on a fundamental undergraduate background in linear algebra and calculus, covers continuous optimization, constrained/unconstrained and linear/nonlinear, as well as selected topics in discrete optimization. Some programming experience is needed for course projects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APM | 524 | Spectral Methods | Extends approximation theory to global methods, including Fourier and orthogonal polynomial expansions. Applications to imaging and hyperbolic, parabolic, and elliptic partial differential equations. Students should have previous graduate courses in ordinary and partial differential equations, basic programming skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 525 | High-Performance Computing | Supercomputer architectures, parallel programming environments, languages, libraries, and algorithms for high-performance numerical simulations. Instructor/Department approval is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only APM 525, MAE 494 (High-Performance Computing) or MAE 598 (High-Performance Computing) |
| APM | 526 | Advanced Numerical Methods for Partial Differential Equations | Partial content will vary from semester to semester, but may include hyperbolic conservation laws, finite element methods, multigrid methods, and parallel algorithms for partial differential equations. Applications to scientific, biomedical, and industrial problems. Students should have basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 530 | Mathematical Cell Physiology. | Mathematical modeling of dynamical aspects of cell physiology. Diffusion, membrane transport, intracellular calcium channel kinetics, calcium oscillations and waves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 531 | Mathematical Neuroscience I | Mathematical modeling of electrochemical processes in nerve cells. Dendritic modeling, dendritic spines and synaptic plasticity, bifurcation analysis of excitable membrane models, deterministic and stochastic methods for threshold dynamics and bursting, relaxation oscillations. Students should have had a previous graduate-level PDE course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 533 | Mathematical Population Biology I | Selectively covers population biology models in the forms of systems of difference equations or ordinary differential equations. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous graduate-level course in ODE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 534 | Mathematical Population Biology II | Selectively covers population biology models in the form of partial differential equations and systems. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous basic graduate-level course in ODE and PDE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 535 | Mathematical Models in Medicine | Mathematical models for the etiology, epidemiology, pathogenesis, morphology and treatment of disease. Covers dynamical models of cancer and viral infections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 541 | Stochastic Modeling in Biology | Markov processes, random walks, martingales, branching processes, logistic growth model, Wright-Fisher model, Kingman's coalescent, bound and site percolations, contact processes, voter models. Students should have previously taken course work in probability and/or stochastic processes (or have a recommendation from their advisor). Recommendation from advisor is typically for students in biology or physics that have not taken statistics courses but have a good background in mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 553 | Dynamical Systems | Center manifolds, structural stability, normal forms, averaging, chaos, control and synchronization. Students should have a previous graduate course in ODE or applied analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 560 | Applied Dynamical Systems | Bifurcations, normal forms, pattern formations, mixing, Lagrangian chaos, and applications to fluid dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 570 | Applied Linear Operators | Bounded linear and compact operators on Hilbert spaces. Linear integral equations, Fredholm and Hilbert-Schmidt theory, and approximate methods. Distributions. Completion of a course in Applied Analysis is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 575 | Perturbation Methods in Applied Mathematics | Regular and singular perturbation methods for ordinary and partial differential equations. Boundary layer theory, matched asymptotic expansions, multiple-scale, homogenization, and WKB methods. Application to nonlinear oscillations, bifurcation and stability problems. Completion of a course in Differential Equations II or Partial Differential Equations in Engineering is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: APM 502 or MAE 502; Credit is allowed for only APM 575 or MAE 505 |
| APM | 576 | Theory of Partial Differential Equations I | Existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 577 | Theory of Partial Differential Equations II | Continuation of existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): APM 576 |
| APM | 581 | Geometry and Control of Dynamical Systems I | Manifolds, tangent and cotangent bundle, Lie theory, integrability and controllability, and feedback control. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APM | 582 | Geometry and Control of Dynamical Systems II | Variational principles, Euler-Lagrange equations, Hamiltonian systems, optimal control, connections and curvature. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP4 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARA | 101 | ASU: The Art Experience | Introduces the culture, challenges and opportunities of the School of Art. Addresses essentials for academic and personal success within the university. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 1 | | Credit is allowed for only ARA 101, 194 (ASU Art Experience) or HDA 194 (ASU Herberger Inst Experience) |
| ARA | 110 | Sculpture Safety | Introduces safety and environmental health in the sculpture studios. Pre- or corequisite for all sculpture classes. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 1 | | |
| ARA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 195 | Art in My World | Basic concepts and fundamental questions that provide insights into art making and that affect one's understanding and appreciation of art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARA | 202 | Understanding Photographs | Slide lecture course in understanding photography as a fine art form. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARA | 218 | Art and Visual Learning | Broad-ranging introduction to art and the visual world, focusing on art and artifacts from diverse cultures and eras, various two- and three-dimensional media, meaning and purpose in art, as well as community and internet art resources. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ARA 218 or 294 (Art and Visual Learning) |
| ARA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 309 | Photography Now | Explores contemporary practice through lectures, readings, exhibition visits, screenings and discussions. Explores work created within the past thirty years up to the present. Students act as a collective "ear to the ground" for the medium, engaging in first-hand experiences and research and being responsible to share those experiences with the class as active agents of discovery. Requires reading current periodicals, attending and discussing photographic lectures and exhibitions both in-class and beyond within the local community. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 2.00 GPA; minimum 45 hours. Credit is allowed for only ARA 309 or 394 (Photography Now) |
| ARA | 311 | Art Appreciation and Human Development | Foundations of art for children and young adults. Emphasizes learning, development, and understanding art in historical and cultural contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-ART student; ENG 101; ENG 102; Minimum Junior standing |
| ARA | 330 | Issues in Intermedia | Critical survey of recent theory and practice in "intermedia" art. Created specifically to provide a common historical and theoretical framework for students majoring in the intermedia area, as well as to anyone seeking to broaden his or her understanding of non-traditional media, performance, installation, computer art, video, social practice, Webart and interactivity and their relationship to contemporary society and discourse. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 216 or minimum 45 hours; Credit is allowed for only ARA 330 or ARA 494 (Issues in Intermedia) |
| ARA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARA | 396 | Professional Practices for Design and the Arts | Prepares young designers, artists and individuals in other creative fields to successfully enter the professional world of art and culture beyond the support system of the university. Through examining contemporary artists' models of practice and creative entrepreneurship, participating in hands-on exercises, field trips, engaging with guest lecturers from local cultural institutions and initiatives, student artists learn how they can shape their lives to sustain their artistic practice once they graduate. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 56 hours. Credit is allowed for only ARA 394 (Professional Practices for Artist) or ARA 396 |
| ARA | 460 | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ARA 460 or 560 |
| ARA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARA | 489 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 45 hours; Credit is allowed for only ARA 489 or 494 (Writing Art and Design Criticism) |
| ARA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 560 | Gallery Exhibitions | Provides practical experience in all phases of art gallery operations. Students learn professional art gallery practices through hands-on experience in the School of Art Student Galleries including Harry Wood, Step, and Gallery 100. Class members assist BFA and MFA candidate students in many phases of exhibition preparation and execution as well as assist with the curation and design of group exhibitions. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARA 460, 560 or 598 (Gallery Exhibitions) |
| ARA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 589 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person, analyzing and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or non-degree seeking). Credit is allowed for only ARA 489 or ARA 589 or ARA 598 (Writing Art & Design Criticism) |
| ARA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARA | 460 | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ARA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| ARA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| ARA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 101 | Elementary Arabic I | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Credit is allowed for only ARB 101 or MSA 101 |
| ARB | 102 | Elementary Arabic II | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Credit is allowed for only ARB 102 or MSA 102 |
| ARB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 24 earned hours |
| ARB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 201 | Intermediate Arabic I | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only ARB 201 or MSA 201 |
| ARB | 202 | Intermediate Arabic II | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only ARB 202 or MSA 202 |
| ARB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 311 | Advanced Arabic Skills I | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 321 | Arabic Conversation I | Emphasizes spoken Arabic and conversation skills. Simultaneously develops communicative skills, vocabulary, and cultural awareness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 331 | Arabic/Islamic Culture and Literature | General introduction to the Middle East that synthesizes cultural, social, and literary information. Focuses on the experiences of ordinary Middle Eastern people to convey a grassroots sense of the Middle East. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 335 | Arabic Culture and Islam | Develops awareness of Arabic culture and Islam. Covers a variety of cultural topics, including family, status of women, food, music, and Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| ARB | 336 | Introduction to the Qur'an | Introduces the Qur'an and examines the historical, contextual, religious and interpretive dimensions wherein the Qur'an developed. Deals with the structure of the Qur'an, the different sections, suras (Qur'anic chapters), and some of the verses. Also includes an introduction to the idea of revelation, its history, the content and some of the different themes of the Qur'an, and discusses aspects of the Qur'an as a source of law. Taught in English; requires no knowledge of Arabic or Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better. Credit is allowed for only ARB 336 or 394 (Introduction to the Qur'an) |
| ARB | 337 | Hadith and Prophetic Tradition | Considers the Hadith as a literary text and as the prophetic tradition in Islam. Focuses on the development of the Hadith as a vast subject in Arabic literature, its collection methodology, Hadith science, and its contents. Gives special attention to the relationship of the Hadith as the second source, after the Qur'an, of Islamic knowledge, Islamic theology, Islamic philosophy and Islamic law. Explores the various ways and approaches in which Muslims employ the Hadith along with the Qur'an in their search for meaning, identity and knowledge. All readings are in English; requires no prior knowledge of Arabic language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better; Credit is allowed for only ARB 337 or 394 (Arabic Hadith and Prophetic Tradition) |
| ARB | 341 | Quran Text and Women | Addresses Muslim women scholars' argument that it is not the religion but the patriarchal interpretation of the Quran that have kept Muslim women oppressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 351 | Classical Arabic Literature | Provides a survey in classical Arabic literature. Focuses on the development of classical Arabic poetry and prose since their interceptions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 352 | Modern Arabic Literature in Translation | Surveys the major trends, themes and genres of modern Arabic literature in translation. Provides a foundational knowledge of modern literature in the Arabic language. Focuses on continuity and change, cultural diversity and multiplicity in the Middle East, and the social, religious and historical aspects of modern Arab culture. No knowledge of Arabic language is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only ARB 352 or 394 (Introduction to Modern Arabic Literature) |
| ARB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 411 | Advanced Arabic Skills II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

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| ARB | 421 | Arabic Conversation II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ARB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ARB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARE | 250 | Teaching Inquiry in Art | Issues in teaching and learning through directed, guided, and independent inquiry about artworks and through art making. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 101, ARS 102, and 6 hours (2 classes) from ART 111, 112, 113 or 115 with a C or better or currently enrolled |
| ARE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 301 | Studio Art and Human Development | Study of human development in studio art from early childhood to adult years. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARE | 370 | Teaching Visual Culture | Explores issues and applications of everyday aesthetics that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA or BFA Art major: ARE 250 OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 or ARS 102; ART 110; ART 112 (or ART 113, 115 or 116) |
| ARE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 440 | Interdisciplinary Art Education | Explorations in art education's disciplines, history, and people's artmaking development at diverse age levels and abilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BIS Interdisciplinary Studies (Studio Art concentration) or Herberger Institute major or Studio Art minor; minimum 2.00 GPA; minimum 55 hours |
| ARE | 446 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |
| ARE | 482 | Teaching Art Processes | Art traditions of the 20th century as a basis for studio and art history instruction. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Fine Arts Art student |
| ARE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARE | 486 | Art Education: Strategies and Applications | Implementation and evaluation of art instruction for K-12 population. Includes teaching of Saturday classes in the Children's Art Workshop. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 482 with C or better |
| ARE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 496 | Methods and Assessment of Learning in Art | Individual or group research on the assessment of art learning incorporating theory and practice. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 250 with B- or better |
| ARE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |

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| ARE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisites: Minimum 90 hours |
| ARE | 510 | Visual Culture Research | Research on instruction of everyday aesthetics and related issues that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 520 | Issues in Teaching Inquiry in Art | Issues in teaching and learning focused both on inquiry about artworks and on inquiry through art making. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 525 | Research on Art Instruction | Research methods and assessment of learning in art. Pilot studies on the effects of instruction on learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 530 | Issues in Teaching Studio Art | Critical examination of issues concerning teaching multicultural art to different populations of students. Historical and philosophical foundations reviewed. Recommended to be taken before ARE 535. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 535 | Research on Teaching Studio Art | Review of empirical and historical research methods, learning theory, and assessment of learning in studio art, including developmental studies and their limitations. Pilot studies on the effects of instruction upon learning. Recommended to be taken after ARE 530. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 540 | Teaching Art in Cultural Contexts | Relationship of multicultural perspectives to teaching/learning art criticism, aesthetics, studio art, and art history. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 546 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores and analyzes international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |
| ARE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 594 | Conference and Workshop | Topical instruction, usually in compressed format leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 451 | Architecture Field Studies | Organized field study of architecture in specified national and international locations. Credit/no credit. May be repeated for credit with director approval. | N | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | |
| ARP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: ADE 322 with a C or better; Co-requisite: ADE 421; ATE 451 |
| ARP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| ARP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better |
| ARP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |

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| ARP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Architecture student |
| ARS | 100 | Introduction to Art | Provides an introduction to the understanding and enjoyment of art through the study of painting, sculpture, design, photography, and the decorative arts. Students gain an awareness of meaning, functions, and significance of art, while learning an art-related vocabulary and a set of analytical tools for discussing and understanding art from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art majors; Credit is allowed for only ARS 100, 101, 102, or 300 |
| ARS | 101 | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 102 | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 201 | Art of Asia | History of the art of the Asian cultures, with emphasis on China, Japan, and India. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 202 | Art of Africa, Oceania, and the Americas | History of art of Africa, Oceania, and the New World. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 250 | History of Photography | History of photography from the 19th century to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 300 | Introduction to Art | Parallels ARS 100 course content but requires a higher level of accomplishment and comprehension. Introduces visual culture, the purpose of art, and the relationship between art and visual culture. Students learn how visual culture pervades our everyday lives and how understanding visual literacy can help us participate more fully in the world around us. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art major: Minimum 55 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 100, 101, 102 or 300; Graphic Design majors: Minimum 2.00 GPA; Minimum 55 hours; Graphic Design majors with credit for ARS 100 may not enroll in ARS 300 |
| ARS | 302 | Art/ Africa,Oceania & Americas | Issues in the art of Africa, Oceania, and the Americas related to ritual, gender, transformation of tradition, and encounters with Europeans. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | Pre-requisite: ENG 102, 105, or 108 |
| ARS | 310 | The Renaissance in Tuscany | Course taught in Florence, Italy. History of arts in Tuscany with focus on city of Florence from 14th through 16th centuries. Completion of ARS 101 and 102 suggested. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARS | 330 | The Portrait | Examines the history and production of portraits in contexts of social hierarchies, historical events, gender, politics, class, morality and aesthetics with a focus on the 15th to the 21st centuries in painting, sculpture and photography. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Any 200-level or higher course in APH, ARS, ENG, FMS, HST, MHL with B or better; Credit is allowed for only ARS 330 or 394 (Genre: Portraits) |
| ARS | 340 | Art in America | American art from colonial times through the Second World War. Not available to students who have completed ARS 542. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101. Credit is allowed for only ARS 340 or 542 |
| ARS | 345 | Art and Television | Critical introduction to the interrelation of technology and visual art using the tools of art history and media/cultural studies. Students read theorists of the relation between visual art and the mass media, and use them to analyze early presentations of visual art and art history on television of the 1960s and 1970s. Examines the contemporaneous and parallel development of video art--an artistic medium appropriated from television technology--through the study of key video artworks. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: minimum 2.00 GPA; minimum 45 earned hours; Credit is allowed for only ARS 345 or ARS 394 (Art & Television) |
| ARS | 362 | Pre-Columbian Art I | Architecture, sculpture, ceramics, painting, and other arts of Mesoamerica before European contact. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |

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| ARS | 402 | Art of Ancient Egypt | Aesthetic, philosophical, and cultural basis of Egyptian art from pre-Dynastic period through New Kingdom. Emphasis on sculpture and architectural monuments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101 or ARS 102 with C or better; Credit is allowed for only ARS 402 or 502 |
| ARS | 404 | Greek Art | History of art, architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s): ARS 101 with C or better; Credit is allowed for only ARS 404 or 504 |
| ARS | 406 | Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 |
| ARS | 410 | Early Christian and Byzantine Art | Art and architecture of the early church and the Byzantine Empire from the 4th to the 15th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 412 | Early Medieval Art | Painting, sculpture, architecture, and the minor arts from Migration, Carolingian, and Ottonian periods considered within religious, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better |
| ARS | 414 | Romanesque Art | Sculpture, painting, architecture, and minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 414 or ARS 514 |
| ARS | 416 | Gothic Art | Painting, sculpture, and architecture in western Europe during the Gothic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 417 | Late Gothic Art in Central Europe | Sculpture, painting, and architecture of the late-Gothic style, ca. 1350-1525, considered within religious, social, economic, and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 417 or ARS 517 |
| ARS | 418 | German Renaissance and Reformation Art | Graphics, painting, sculpture, and architecture, ca. 1450-1550. Reformation themes and Renaissance style considered within religious, political, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 418 or ARS 598 (German Renaissance and Reformation Art) |
| ARS | 422 | Italian High Renaissance Art and Mannerism | History of Italian art during the 16th century, including the achievements and influence of Leonardo da Vinci, Raphael, and Michelangelo. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 422 or 522 |
| ARS | 424 | Italian Baroque Art | Italian painting, sculpture, and architecture of the 17th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 426 | Art of the 17th Century in Northern Europe | Baroque painting, sculpture, and architecture in Flanders, the Netherlands, France, and England. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 434 | Art and Visual Culture of 19th Century | History of European art (all media) from French Revolution to Paris World Fair of 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: At least one course in APH, ARS, ENG, FMS, HST or MHL with B or better; Credit is allowed for only ARS 434 or 534 |
| ARS | 435 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 436 | The Artist, War, and Revolution (Versailles to Vietnam) | Critical study of artistic responses to war and revolution in Europe and United States from French Revolution to Vietnam conflict. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 438 | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | 439 | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | 440 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 55 hours; At least one 200-level course in literature, art history, history, OR film and media studies with a grade of B- or better; Credit allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| ARS | 441 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Also considers historical precedents, including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 442 | Critical Issues in American Painting | Explores issues of national identity and western expansion, Manifest Destiny, through images of race and violence in western American painting from 1800 to the early 20th century. Includes "claiming and settling the wilderness," cultures in conflict, the cowboy, and visions of an enchanted land. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 442 or 542 |
| ARS | 443 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| ARS | 444 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| ARS | 451 | 20th Century Photography | Personalities, processes, images, and ideas in photography from 1914 to present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |

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| ARS | 456 | Introduction to Museums | Broad scope of what museums do by exploring their history and the critical issues they face. Acquaints students with the basic functions of specific museum departments and staff, including the role of director, curator, registrar, preparator, as well as fund raising, marketing, audience development, education, exhibitions, conservation, ethics, cultural/heritage tourism and public art. Guest speakers and field trips enhance classroom material. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ARS 101 or ARS 102 OR any 200-, 300- or 400-level course in ASB, ENG or HST with B- or better |
| ARS | 458 | Critical Theories in the Visual Arts | Examines current critical theories through their application to all visual arts. May include new historicism, Marxism, deconstruction, post-structuralism, semiotics, Lacanian psychoanalysis, feminism, postmodernism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 459 | Writing Art Criticism | Traditional and contemporary approaches to the criticism of art. Students write critical essays. Latter half of the semester stresses the criticism of contemporary art in various media. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: ARS 458 |
| ARS | 460 | Art Now | Critical overview of major issues and controversies of the last 10 years within the global, national, and local art scene. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 102 with B- or better or one course in ARS, ENG or HST at the 200 level or higher with B or better; Digital Culture major |
| ARS | 465 | Native Art of North America | Native American art forms of the United States and Canada from prehistoric times to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 465 or 565 |
| ARS | 466 | Native American Art of the Southwest | American Indian art in the southwestern states from its origins to the present day. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 468 | Art of the Arctic and Northwest Coast | Art associated with ceremony, shamanism, and daily life in the Arctic and on the Northwest Coast. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 469 | Mexican Art | Art of Mexico and related Central American cultures from the prehistoric to the contemporary schools. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 472 | Art of China | Study of major forms in Chinese art: ritual bronze, sculpture, ceramic, calligraphy, painting, and architecture. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA |
| ARS | 473 | Art of Japan | Japanese art from the Joman period to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisite: Minimum 55 hours; Credit is allowed for only ARS 574 or ARS 473 |
| ARS | 475 | Chinese Painting | From Ku K'ai-chin to Ch'i Pai-shih. Major artists, styles, and movements in Chinese painting. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 475 or 575 |
| ARS | 480 | Research Methods | Methodology and resource material for art historical research. Techniques of scholarly and critical writing and evaluation of bibliographic sources. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: Museum Studies or Art History student, Junior standing; ARS 101 and ARS 102 with B- or better |
| ARS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARS | 485 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 485 or 585 |
| ARS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisite: Minimum 90 hours |
| ARS | 501 | Methodologies and Art History | History of the discipline and an exploration of various methodologies, critical theory, and bibliographies used by art historians. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 502 | Critical Studies in Egyptian Art | Egyptian art from pre-Dynastic to New Kingdom periods. Focus on aesthetic, philosophical, and cultural contexts. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 402 or 502 |
| ARS | 504 | Critical Approaches to Greek Art | Art and architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 404 or 504 |
| ARS | 506 | Critical Studies in Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. Research paper and/or supplemental readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 514 | Critical Approaches to Romanesque Art | Sculpture, painting, architecture, and the minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. Requires research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 414 or 514 |

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| ARS | 533 | The Pre-Raphaelites | Explores Pre-Raphaelite culture, both literature and art, and relevant social history, from the Pre-Raphaelite Brotherhood through Aestheticism and early twentieth century, focusing on interactions between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 534 | Art and Visual Culture of the 19th Century | Critical study of visual arts using primary source material from mid-19th century to WWI within philosophical, socioeconomic, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 434 or 534 |
| ARS | 538 | Art of the 20th Century I | Charts how the avant-garde in the early 20th century developed different strands of modern art as it sometimes grew closer to, and at other times veered away from, radical politics. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 438, 538 or 598 (Art of 20th Century I) |
| ARS | 539 | Art of the 20th Century II | General introduction to major trends and issues of Euro-American art created between 1955 to around the turn of the 21st century. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for either ARS 439 or ARS 539 or ARS 598, Art of 20th C |
| ARS | 540 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critiques stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| ARS | 541 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Considers historical precedents including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 542 | Critical Issues in American Painting | Explores themes and social issues in American art with a critical study of American painting from the 18th century to 1850. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 340, 442 or 542 |
| ARS | 543 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (genius, deviant, etc.); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ARS 443 or ARS 543 or FMS 430 or FMS 543 or ARS 598 (Artists in Film: Biopics) |
| ARS | 544 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 444, ARS 544, ARS 598 (Films of India) or FMS 426 |
| ARS | 565 | Native Art of North America | Critical examination of Native American art within culture, prehistory to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 465 or 565 |
| ARS | 574 | Studies in Japanese Art | Critical examination of the nature and history of Japanese art, its rich heritage and its indebtedness to foreign sources. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 473 or 574 |
| ARS | 575 | Approaches to Chinese Painting | Critical history of Chinese painting from Eastern Chou to 1911. Emphasis on masters, regional developments, and conceptual underpinnings. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 108 hours; Senior or Postbaccalaureate Undergraduate or Graduate; Credit is allowed for only ARS 475 or 575 |
| ARS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 585 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 485 or 585 |
| ARS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ARS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 101 | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | 102 | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARS | 438 | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | 439 | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ARS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ART | 110 | Drawing as Seeing and Thinking | Immerses students from a broad range of non-art disciplines in the practice of drawing. Considers and reflects on drawing in its most expanded form: as a primary tool of communication and creative problem solving, as movement, as sensory experience and as its own unique method of cognition. Divides class meetings among lectures, exercises, field excursions and opportunities for critical dialogue. Students leave with an appreciation of the unique power of mark-making and an improved understanding of its application in their lives. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ART 110 or 194 (Drawing as Seeing and Thinking) |
| ART | 111 | Drawing I | Fundamental, technical, and perceptual skills using common drawing media and their application to pictorial organization. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 112 | 2-D Design | Fundamentals of pictorial design. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art, Art-Exploratory, Minor in Studio Art, or BIS concentration in Studio Art student |
| ART | 113 | Color | Principles of color theory as related to the visual arts. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 115 | 3-D Design | Fundamentals of 3-D form. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |

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| ART | 116 | Introduction to Digital Media | Concentrates on the fundamentals of digital media, including imagery, sound, video, animation, and the Web. Assignments are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques and software as they become familiar with contemporary artistic processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 116 or 194 (Introduction to Digital Media) |
| ART | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ART | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 201 | Photography I | Development of skills and techniques of black and white photography. Emphasis on camera work and darkroom procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 202 |
| ART | 202 | Photography I Lab | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 0 | | Corequisite(s): ART 201 |
| ART | 204 | Photography II: Black and White | Photography as an art medium with additional exploration into personal photographic aesthetics. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 205 | Photography II: Color | Uses both film and digital capture to explore color photography in depth. Emphasizes computer editing and printing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 211 | Drawing II | Continued development of technical and perceptual skills. Emphasizes materials and pictorial content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 214 | Life Drawing I | Development of skill and expressiveness in drawing the basic form, construction, and gesture from the human figure. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 216 | Intermedia Practices | Investigates the multidisciplinary practice of Intermedia within a fine art context and functions as a bridge between foundation courses and the Intermedia degree area specialty. Relying on principles and techniques from foundation level classes, students learn to choose appropriate media for a particular idea and construct work that is concept-driven and incorporates cross-disciplinary approaches. Students develop individual and diverse approaches to fusing traditional art disciplines with experimental, performative, spatial, and digital technologies. Students explore the full range of options available to contemporary artists and discuss the ever-shifting definition of intermedia and new media. Students may work in media including drawing, photography, mixed media, video, sculpture, networked, multimedia, electronic arts, digital sound manipulation, image processing, performance, and installation. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/corequisite(s): ART 113, 116 or 194 (Intro to Intermedia) with C or better; 2 from ART 111, 112 or 115 with C or better OR Art Digital Culture major; ART 111, 112 or 113 with C or better; credit for only ART 216 or 294 (Intermedia Practices) |
| ART | 218 | 3D Tools | Introduces 3D data capture, 3D modeling and rendering, and 3D prototyping and fabrication through creative/research activities using CNC and rapid prototyping tools. Projects are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques, software tools, and hardware in the course of making their creative/research projects, becoming familiar with contemporary artistic and engineering processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 218 or 294 (3D Tools) |
| ART | 223 | Painting I | Fundamental concepts and materials of traditional and experimental painting media. Emphasizes preparation of painting supports, composition, and color. Lab. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 113 with C or better |
| ART | 227 | Watercolor I | Fundamental concepts, materials, and techniques of watercolor. Emphasizes problem solving, basic skills, composition, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 113 with C or better |
| ART | 231 | Sculpture I | Explores sculptural forms through concepts related to basic materials. Focus on studio production, safety, aesthetic criticism, and history of sculpture. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 115 with C or better |
| ART | 253 | Introduction to Printmaking | Introduces basic monotype, intaglio, relief, and related techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 113 with C or better |
| ART | 261 | Ceramic Survey | Handforming methods, throwing on the wheel, decorative processes, and glaze application. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 112 and ART 115 with C or better |
| ART | 272 | Introduction to Metals and Jewelry | Emphasizes metal fabrication. Basic techniques of cutting, piercing, forging, soldering, and forming of non-ferrous metals. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; maximum junior standing; ART 112 and ART 115 with C or better |
| ART | 274 | Wood I | Fundamental woodworking techniques to produce creative functional 3-D objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 276 | Fibers I | Explores traditional and contemporary materials and basic techniques related to fibers. Embroidery, feltmaking, dyeing, block printing, plating, 3-D structures. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 112, 115; undergraduate Art major; maximum junior standing OR The Arts (Fashion Design) major with ART 110 with C or better |

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| ART | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 301 | Alternative Processes | Recognition Alternative Processes of the inherent characteristics of nonsilver processes and their use in communicating ideas. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major with completed portfolio; ART 204 with C or better |
| ART | 304 | Junior Photographic Projects | Interpretation and manipulation of light as a tool in the performance of expressive photography. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; completed portfolio milestone (if required); ART 204 (and ART 101, ART 201) with C or better |
| ART | 307 | View Camera | View camera and darkroom techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART204 (and ART101, ART201) with C or better |
| ART | 311 | Drawing III | Emphasizes composition and exploration of drawing media. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major or completed studio milestone; ART 211 with C or better or Studio Art Minor or BIS (Studio Art); ART 110 with C or better; ART 112 with C or better |
| ART | 314 | Life Drawing II | Drawing from the model with greater reference to structural, graphic, and compositional concerns. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 110, 112, 214 (or Studio Art concentration or minor); Art student or completed portfolio milestone |
| ART | 323 | Painting II | Development of competency in skills and expression. Assigned problems involve light, space, color, form, and content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio; ART 223 with C or better OR Studio Art minor: ART 110 with C or better; ART 113 with C or better |
| ART | 325 | Figure Painting | The human figure clothed and nude as the subject for painting in selected media. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 214 and ART 323 with C or better |
| ART | 327 | Watercolor II | Explorations of personal expression in watercolor. Continued development of watercolor skills using traditional and experimental materials and techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: Art major: ART 227 or Studio Art minor: ART 110 or BIS Studio Art emphasis: ART 110 |
| ART | 331 | Sculpture II | Emphasizes metal fabrication as an expressive sculptural process. Techniques in welding, cutting and bending of metals and their aesthetics. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major or completed studio milestone: ART 231with C or better OR BIS (Studio Art) or Studio Art minor: ART 110, 115 with C or better |
| ART | 332 | Sculpture III | Explores diverse media with a focus on mold-making processes. Development of the sculpture portfolio. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 331 with C or better |
| ART | 333 | Foundry Casting Methods | Fine art and techniques of metal casting: mold making, foundry safety, finishing techniques, application of patinas, and history of casting. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 332 with C or better OR Studio Art minor; ART 110 and 115 with C or better |
| ART | 345 | Visualization and Prototyping | Studio/seminar introduces concepts of computer visualization, modeling, and rapid prototyping in an interdisciplinary manner. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Digital Art OR Intermedia student |
| ART | 346 | 3-D Computer Imaging and Animation | 3-D modeling and animation. Emphasizes concepts and fine arts applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | CS | Prerequisite(s): ART major or Digital Culture (Art) major: ART 111, ART 112 or ART 113 with a 'C' or better OR Minor in Studio Art (HISTARTMIN): ART 110 with a 'C' or better, and ART 112 or ART 113 or ART 115 or ART 116 with a 'C' or better. |
| ART | 348 | Animation Motion Studies | Principles and applications of 3-D animation for fine arts. Emphasizes animation techniques for expressive effects. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 with C or better |
| ART | 351 | Intaglio I | Introduces concepts and techniques of intaglio processes, including non-acid and acid techniques such as drypoint, line etch, aquatint, photo etching; introduces multiple plate printing ala poupee wiping, chine colle, and basic color. Idea-generating exercises include visual signifiers of identity, democratic multiple, time and space, the disembodied gaze, and reconsidering beauty. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 352 | Lithography I | Monochromatic and color planographic printmaking utilizing stone and aluminum plate processes. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better |
| ART | 354 | Screen Printing I | Introduces paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; two from ART 111, 112, 113 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 360 | Ceramic Throwing | Design analysis and production of functional pottery. Emphasis on throwing techniques, surface enrichment, and glaze application. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA Art major: ART 261 OR Studio Art minor (or BIS Studio Art emphasis): ART 110 and 115 |
| ART | 364 | Ceramic Handbuilding I | Search for form using handbuilding techniques. Kiln firing and related problems. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |
| ART | 365 | Ceramic Handbuilding II | Continuation of ART 364 with an additional focus on large-scale works, surface treatments, and glaze decoration with related kiln firing applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and 364 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 364 with C or better |
| ART | 372 | Casting and Jewelry Techniques | Covers lost wax casting for jewelry scale work and alternative casting methods and mold making as well as other techniques such as chain making and marriage of metals. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 373 | Form Emphasis in Metals | Covers forming non-ferrous metals using techniques such as anticlastic and sinclastic forming, raising, fold forming. Projects focus on hollow forms using these various techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 374 | Wood II | Individual and directed problems in wood related to the production of unique functional art objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 with C or better |
| ART | 376 | Woven Structures I | Explores weaver- and loom-controlled structures with an emphasis on formal issues, historic precedence, and contemporary investigations. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |
| ART | 377 | Surface Design | Application of dyes and pigments on cloth exploring techniques, formal issues, and content. Cyanotype, monoprinting, painting on silk, resists, stenciling. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |

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| ART | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 403 | Senior Photographic Projects | Technical and philosophical refinement of personal aesthetic with various photographic media. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 404 | Portraiture Photography | Photographing people. Critical discussions and slide lectures on issues in portraiture. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 408 | Experimental Film | Facilitates the exploration of 16 mm motion picture film as material and methodological fodder for artists. Students use original, found, and hand-altered footage to create projects of their own design. Covers basic techniques including camera operation, film exposure, and analog editing practices. Explorations also include in-class experiments, readings, discussions and screenings. For upper-division undergraduate and graduate art students attracted to the material and theoretical issues embodied in film and who are curious about how film might inform their own ongoing advanced artistic pursuits. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 3.00 GPA; minimum 45 hours. Credit is allowed for only ART 408 or ART 508 |
| ART | 409 | Photographic Exhibition | Care of photographic prints, print presentation, and exhibition. Practical experience in gallery operations. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 410 | Landscape Photography | Photographing landscapes. Critical discussion and presentations on issues in landscape photography. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 411 | Drawing IV | Visual and intellectual concepts through problem solving and independent study. Emphasis on the individual creative statement. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 211 and ART 311 with C or better |
| ART | 414 | Life Drawing III | Various media and techniques on an advanced level. The human figure as an expressive vehicle in various contexts. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 314; credit is allowed for only ART 414 or ART 514 |
| ART | 423 | Painting III | Further exploration of techniques and concepts of painting. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 223 with C or better; ART 323 with C or better; Art major; credit is allowed for only ART 423 or 523 |
| ART | 425 | Advanced Figure Painting | The human figure clothed and nude as the subject for painting in selected media. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 223, 323 and 314 with C or better, credit is allowed for only ART 425 or 525 |
| ART | 427 | Art on Paper | Advanced techniques, concepts, and processes with water media and mixed painting and drawing media on paper. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute student: min 55 hours; min 2.00 GPA or BIS Studio Art emphasis or Studio Art minor: ART 110 and ART 112 (or ART 113, 115, 116) with C or better; min 2.00 GPA; min 45 hours. Credit is allowed for only ART 427 or 527 |
| ART | 428 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: BA or BFA Art major; ART 231 with C or better; Credit is allowed for only ART 428, 494 (New Systems-Sculpture) or 528 |
| ART | 431 | Special Problems in Sculpture | Development of a personal approach to sculpture. Emphasis on form, individual problems, and related color technology. Professional practices and presentation. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231, ART 331 and 332 with C or better |
| ART | 432 | Neon Sculpture | Techniques for creating neon in an art context. Glass tube bending and fabrication. Construction of artworks utilizing light-generating gasses. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |
| ART | 433 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Requires participation in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Provides a history of the use of cast metal in the visual arts and an understanding of how casting processes can be applied to contemporary sculptural concepts. Requires participation in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Corequisite(s): ART 332 with C or better |
| ART | 435 | Foundry Research Methods | Research in foundry techniques. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): minimum 45 hours |
| ART | 436 | Architectural Sculpture | Sculptural concepts as related to architecture and other man-made environments. Scale drawing, models, and relief sculpture. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 231 with C or better; ART 331 with C or better; ART 332 with C or better |
| ART | 437 | Film Animation | Production of short 16mm films that feature articulated sculptural objects, models, dolls, puppets, and graphics through the use of single-frame filming techniques. 6 hours a week. May be repeated for credit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better |
| ART | 438 | Moving and Interactive Systems in Sculpture | Explores new tools in digital fabrication, multipart constructions and digitally manipulated surfaces. Earmarks exploration regarding fabrication with computer numerically controlled lasers, plasma cutters and routers. Regular technique demonstrations, slide lectures and hands-on studio work. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better; Credit is allowed for only ART 438 or 538 |
| ART | 439 | Intermedia Studio | Exploring visual effects by combining traditional and nontraditional methods, techniques, and concepts. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Digital Culture (Art) student; ART 111, ART 112 or ART 113 with C or better or Studio Art minor (or BIS Studio Art emphasis), ART 110 and 116; credit is allowed for only ART 439 or 539 |

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| ART | 440 | New Media Concepts | Continued experiments with new media and interdisciplinary concerns in art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 441 |
| ART | 441 | Video Art | Utilizing video and audio equipment essential to the production of broadcast quality video art. 2 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): Art portfolio completed; corequisite ART 440 |
| ART | 442 | Art and Community | Explores through studio practice, research and presentations intermedia social art practice, public practice, art/life practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit is allowed for only ART 442 or 494 (Art and Community) |
| ART | 443 | Intermedia Performance | Experimental, conceptual, and interdisciplinary studio art with emphasis on performance and new media practices. May be repeated once for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit allowed for either ART 443, 543 or 598 (Intermedia Performance) |
| ART | 444 | Web Art | Explores Web technology as a medium to create interactive art works for the Internet. Concept-driven curriculum wherein the idea for each work and its development is emphasized. The technical aspect of the work supports the concept. Students create storyboards and flowcharts to facilitate the application of the concept to the technology. The technical emphasis is on interactivity and time-based Net art. Students use existing software, learning the interface and programming associated with the software. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Intermedia majors eligible for upper-division credit; credit is allowed for only ART 444 or 494 (Web Art) |
| ART | 445 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques, including image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): 50 minimum hours; credit is allowed for only ART 445 or 494 (Digital Process for Print) |
| ART | 449 | Computer Animation and Video | Integrates 3-D fine arts animation with video and compositing. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 and ART 348 with C or better |
| ART | 451 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spit bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351 with C or better; credit is allowed for only ART 451 or 551 |
| ART | 452 | Advanced Lithography | Continuation of ART 352. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or completion of portfolio milestone; ART 253 and ART 352 with C or better |
| ART | 453 | Experimental Printmaking: Expanding the Matrix | Alternative methods of working with print techniques, including installations, actions or performances, and other nontraditional formats. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351, 352, or 354 with a C or better; credit is allowed for only ART 453, 553 or 598 (Experimental Printmaking) |
| ART | 454 | Advanced Screen Printing | Continuation of paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 354 with C or better |
| ART | 456 | Fine Printing and Bookmaking I | Letterpress printing and typography as fine art. Study of history, alphabets, mechanics of hand typesetting, presswork, and various forms of printed matter. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better, or non-art major with 56 credit hours; minimum 2.50 GPA. Credit is allowed for only ART 456 or ART 556 or ART 598 Fine Printing and Bookmaking I |
| ART | 457 | Fine Printing and Bookmaking II | Continuation of ART 456. Bookbinding, book design and printing, advanced typography, theory, and presswork. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art student; ART 253 and ART 456 with C or better. Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 458 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments, and 3-D approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better, or non-majors with 56 minimum credit hours; minimum 2.50 GPA. Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 458 or ART 558 |
| ART | 459 | Monoprinting | Nonmultiple printed image using a variety of technical approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BA or BFA Art major, minimum 45 hours; or OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor; ART 110, ART 112 (or ART 113, 115 or 116) with C or better |
| ART | 460 | Ceramic Clay | Research into various clay body formulations, local natural materials, slip glazes, and engobes. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better; Pre- or corequisite(s): ART 360 and ART 364 with C or better if completed |
| ART | 461 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; credit allowed for only ART 461 or 494 (Polymer Plate Prints) |
| ART | 463 | Ceramic Glaze | Glaze calculation and formulation using various glaze colors and surfaces. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 261 with C or better |
| ART | 466 | Special Problems in Ceramics | Emphasis on personal expression within structure of seminars, critiques, and studio work. Professional methods of presentation/documentation of work. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and ART 364 with C or better |
| ART | 472 | Advanced Jewelry and Surface Techniques | Covers jewelry forms and techniques including surface embellishment such as granulation, keum-boo and filigree to be used as tools for aesthetic expression and expand student awareness of historical and contemporary jewelry/metalwork. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 and ART 372 with C or better |
| ART | 473 | Advanced Metals and Mechanisms | Covers new techniques and develops existing skills in non-ferrous metal forming and mechanism fabrication while further refining fitting and finishing techniques, incorporating concept with craft and emphasizing professional practices/portfolio development. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better; ART373 with C or better; credit is allowed for only ART 473 or 598 (Adv. Metals & Mechanisms) |

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| ART | 474 | Advanced Wood | Extended experience and advanced techniques in the use of wood to create functional works of art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 and ART 374 with C or better |
| ART | 476 | Woven Structures II | Emphasizes personal expressions and continues technical exploration in woven structures. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 376 with C or better |
| ART | 477 | Printed Textiles | Techniques for screen printing on fabric exploring pattern as a compositional element. Various stencil methods including photographic processes. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 377 with C or better |
| ART | 478 | Advanced Surface Design | Emphasis on personal expression with advanced problems in stitch resist, arashi shibori, transfers, indigo, vat and disperse dyes, and pigments. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio completed; ART 276, ART 377 and ART 477 with C or better |
| ART | 479 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art major or Studio Art minor; ART 276 with C or better; Credit is allowed for only ART 479 or ART 579 or ART 598 (3-D Fibers) |
| ART | 482 | Senior Exhibitions/Portfolio | Capstone course required of all BFA studio art majors. Students participate in a group exhibition and focus on professional practices, including exhibition display and advertisement, career planning, and development of a professional packet with artist statement, CV, and digital portfolio. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BFA student; minimum 100 hours; credit is allowed for only ART 482 or 494 (Senior Exhibition/Portfolio) |
| ART | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): Art student |
| ART | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | STO | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ART | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | STO | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ART | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ART | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | Prerequisite(s): Art student |
| ART | 501 | Cross-Practice Critique | Engages graduate students in deep, sustained critical discussion about artwork made by students in the class. Students investigate together the process(es) of critiquing artwork and consider and discuss the underlying assumptions and values they bring to this method of communication and pedagogy. Helps students develop and improve their critical voice at whatever level they are at, including the ability to receive and accept critical feedback of their work. Encourages students to hone their sense of personal agency in the context of "the crit." | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| ART | 508 | Experimental Film | Facilitates the exploration of 16 mm motion picture film as material and methodological fodder for artists. Students use original, found, and hand-altered footage to create projects of their own design. Covers basic techniques including camera operation, film exposure, and analog editing practices. Explorations also include in-class experiments, readings, discussions and screenings. For upper-division undergraduate and graduate art students attracted to the material and theoretical issues embodied in film and who are curious about how film might inform their own ongoing advanced artistic pursuits. Graduate level focuses on the development of a personal approach. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 408, 494 (experimental Film), or ART 508, or ART 598 (Experimental Film) |
| ART | 514 | Graduate Life Drawing | Advanced study of the human figure as an expressive vehicle in various contexts. Graduate level focused on the development of personal approach. Timed poses of short and long duration with emphasis on using the figure to enhance the students individual research. Art historical component will be included to enable the student to fit themselves into the context of the use of the figure as it relates to the study of the history of art. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 414 or 514 |
| ART | 523 | Graduate Painting | Concentrates on formal and conceptual skills and explores a variety of topics, including historical and contemporary painting issues, visual literacy, critical thinking, and professional practices. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR Senior or Postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 423 or 523 |
| ART | 525 | Graduate Figure Painting | Advanced study of the human figure clothed and nude as the subject for painting in selected media. Graduate level study focused on the development of personal expression. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 425 or 525 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ART | 527 | Graduate Art on Paper | Exploration focused on conceptual and technical approaches combining mixed media painting and drawing on paper and related surfaces. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute for Design and the Arts graduate student; credit is allowed for only ART 427 or 527 |
| ART | 528 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 428, ART 528, or ART 598 (New Systems Sculpture) |
| ART | 530 | Digital Compositing | Fine arts digital compositing of computer animation, video, and video editing of composites with audio. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 532 | Neon Sculpture | Emphasizes techniques for creating neon in an art context, including glass bending and fabrication. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 532 or ART 598 (Neon Sculpture) |
| ART | 533 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Students are expected and required to participate in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Students deepen their knowledge of the history of the use of cast metal in the visual arts and understanding of how casting processes can be applied to contemporary sculptural concepts, participating in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 533 or 598 (Foundry Casting Methods) |
| ART | 538 | Experimental Systems in Sculpture | Students create sculptures that incorporate movement, sound and interactivity while also developing their personal expression as artists. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 438, 538 or 598 (Exp. Systems in Sculpture) |
| ART | 539 | Intermedia Studio | Investigates how intermedia practice can expand the realm of conversations within contemporary art, life and society. Encourages investigation of social art practice, art/life practices, conceptual art, digital art, emergent media, installation, new genre public art, performance, and visual art with emphasis on research, production and theory. Students expand their ability to assess interdisciplinary strategies. Through reinforcing artistic rigor, students deepen their ability to employ intermedia methods as artistic communication, to express a personalized point of view. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 439, 539 or 598 (Intermedia Studio) |
| ART | 542 | Art and Community | Through studio practice, research and presentations, explores intermedia social art practice, public practice, art/life practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. Graduate students, in conjunction with the instructor, create their own workplan for the course. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 542 or 598 (Art and Community) |
| ART | 543 | Intermedia Performance | This concept-driven course explores intermedia as a contemporary art practice from a performance/live art perspective. Students create performance and time-based work connected to their individual artistic interests while making connections among art, life, and society. Students working in a diverse range of disciplines and artistic genres discover new processes of working and negotiate unexpected connections inherent in interdisciplinary production and cross-disciplinary collaboration. Student projects depend on particular specializations and passions brought to the class and may produce a range of multimedia performance work including performing for the camera, interactive networks, analogue/digital sound, video, sculpture, and installation. Semester I addresses the body as material exploring the body, subjectivity, and cultural histories. Semester II focuses on the body in public space exploring intervention and the everyday. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 543 or 598 (Intermedia Performance) |
| ART | 544 | Graduate-Level Web Art | Students research Web art and apply this to their own art practice. Concepts and content of the Web art class projects parallel individual aesthetic preferences. Explores Web technology as a new medium to create interactive Internet works. Technical emphasis on interactivity and time-based net art. Utilizes existing software, learning the interface and programming associated with it. Includes articles and essays by professional Web artists and theorists in required reading. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 494 (Web Art), ART 544, or ART 598 (Web Art) |
| ART | 545 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Course is comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques: image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 545 or 598 (Digital Processes for Printmaking) |

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| ART | 551 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spill bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or post-baccalaureate undergraduate with minimum of 108 earned hours; credit is allowed for only ART 451 or 551 |
| ART | 553 | Experimental Printmaking: Beyond the Matrix | Focuses on the development of concepts in printmaking beyond the traditional two-dimensional image on paper that is contained in a portfolio or frame. Explores alternative techniques and materials, methods of extending the print beyond 2 dimensions, and expanding the concept of what is a print. Students are encouraged to understand printmaking within the wider context of contemporary art, especially those directly related to the student's main artistic emphasis (if not printmaking). | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 553, 453 |
| ART | 554 | Graduate Screenprinting | Focuses on the development of screenprinting techniques and the ability to utilize these techniques as an expressive visual method of exploring and developing individual research concepts. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 554 or 598 (Advanced Screen Printing) |
| ART | 556 | Fine Printing and Bookmaking I | Offers instruction in the techniques of fine printing—letterpress—and using typography and printing as a fine art medium, as well as evaluating text as image and content in the aesthetics of print. Also considers bookforms, binding techniques and artists' books for the expansion of that aesthetic. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 456, ART 556, or ART 598 (Fine Printing and Bookmaking I) |
| ART | 557 | Fine Printing and Bookmaking II | Continuing study of letterpress in fine art—the book arts—with emphasis on the book. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 558 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments and 3-D approaches. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 458, ART 558 or ART 598 (Papermaking) |
| ART | 559 | Monoprinting | Investigates monoprint/monotype printmaking and its aesthetic possibilities. Students acquire basic and advanced skills in the medium through demonstrations, problem solving exercises, and experimentation. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 559 or 598 (Monoprinting) |
| ART | 561 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 561 or 598 (Polymer Plate Prints) |
| ART | 576 | Woven Structures | Expanding upon prior woven techniques, develops methods in warp manipulation through material explorations, dye techniques and structure applications. Dye methods include ikat, warp painting and over-dyeing. Complex structural investigations include loom controlled double weave, over-shot, computer-aided design, and the compu-dobby loom. In addition to learning technical skills, also provides theoretical and historical readings with in-class discussions that provide impetus for conceptual developments within the assignments. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only ART 476, 576, or ART 598 (Woven Structures) |
| ART | 577 | Printed Textiles | Provides advanced instruction in surface design techniques, focusing on screen printing on fabric. Explores a variety of stencil methods. Studio problems explore structured pattern and single edition prints. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 577 or 598 (Printed Textiles) |
| ART | 578 | Advanced Surface Design | Explores advanced surface design methods and the expressive potential of fabric. Critical analysis of the integration of materials, process, and concept. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 578 or 598 (Advanced Surface Design) |
| ART | 579 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 479, 579 or 598 (3D Fibers) |
| ART | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |

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| ART | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 621 | Studio Problems | Advanced study. 3 hours a week each section. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ART | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): Art student |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| ASB | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | |
| ASB | 222 | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| ASB | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | 321 | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | 335 | Archaeology of the Southwest | Archaeological exploration of the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Pre-requisites: ASB 102, ASB 222 or ASB 223 or minimum 45 credit hours |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease; ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB 100 or SSH 100 |
| ASB | 101 | Anthropology: Understanding Human Diversity | Provides an integrated understanding of biological, historical, and cultural evolutionary processes that account for human variation. Specifically examines how humans evolved and how they obtained the characteristics that make us a unique species. Considers cultural and biological models of cooperation, resource acquisition and distribution, sex and marriage, parenting, conflict and warfare, political structures, power and status, sex roles, ritual, religion, and language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |

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| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| ASB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| ASB | 210 | Human Sexuality: Anthropological Perspectives | Examines the sexual nature and behavior of humans from both a biological and an anthropological point of view across various cultures around the globe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | |
| ASB | 220 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| ASB | 222 | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 223 | Aztecs, Incas and Mayas | Archaeological and historical study of the three best-known ancient cultures of Mesoamerica and South America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 230 | Beginning Culture Theory | Bridges ASB 102 and upper-division courses; introduces cultural theory and fosters independent thinking, critical analysis, communication, and adaptability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | 252 | Sports and Culture | Cross-cultural examination of symbolic and social dimensions of sports past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 272 | Environmental Justice | Surveys key environmental justice issues and movements. Uses interdisciplinary social science perspectives to review and analyze U.S. and international case studies. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Credit is allowed for only ASB 272 or SOS 272 |
| ASB | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| ASB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisites: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| ASB | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better. Credit is allowed for only ASB 301, HST 301 or SSH 301 |
| ASB | 302 | Ethnographic Field Study | Fieldwork study of cultural adaptation through ethnographic research methods and local culture. Taught in Latin America or other international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisite: ASB 102, 222, 223, or ASM 104 |
| ASB | 310 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |

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| ASB | 311 | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | |
| ASB | 314 | Comparative Religion | In-depth study of origins, elements, forms, and symbolism of religion; an advanced comparative survey of religious beliefs and ceremonies; the place of religion in culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 316 | Money and Culture | Using the fundamentals of economic anthropology, investigates how culture shapes our relationship to money and decision making. Provides a foundation for thinking about how production, exchange and consumption can be explained by looking at human behavior, thought and culture, and encourages students to apply anthropological knowledge to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| ASB | 319 | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 321 | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | 322 | Peoples of Latin America | Indigenous, mestizo, and national cultures, rural and urban peoples in the region that today we call Latin America. Covers historic and contemporary events and cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisites: ASB 102 with C or better or minimum 45 hours |
| ASB | 324 | Peoples of the Pacific | Peoples and cultures of Oceania focusing particularly on societies of Melanesia, Micronesia, and Polynesia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 325 | Peoples of Southeast Asia | Cultural-ecological perspective on the peoples of mainland and insular Southeast Asia. Subsistence modes, social organization, and the impact of modernization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 326 | Human Impacts on Ancient Environments | World survey of successful and unsuccessful ancient societies and their impacts on the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | |
| ASB | 327 | Disaster! | Examines the causes of disasters, such as famines and pandemics, throughout human history. Explores cases in which social responses to disaster have helped people survive or led to their demise. Through hands-on activities, students gain experience with popular tools to understand human responses to disasters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Prerequisite(s): ASB 102 with C or better or minimum 45 hours |
| ASB | 328 | Rules, Games, and Society | Concepts and practical tools to study the relation between groups of people and their common resources and public goods. Methods for identifying the diversity of institutional arrangements and analyzing their effectiveness. Example topics include sports, digital commons, environmental management, and urban environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101; Minimum 45 hours |
| ASB | 330 | Thinking Through Archaeology | In-depth study and critique of theories and methods for reconstructing the lives of prehistoric peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 222 (or ASB 223 or 335 or 337) |
| ASB | 335 | Archaeology of the Southwest | Archaeological exploration of the the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H & C | Pre-requisites: ASB 102, ASB 222 or ASB 223 or minimum 45 credit hours |
| ASB | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| ASB | 337 | Pyramids and Hieroglyphs: Life in Ancient Mesoamerica | Preconquest cultures and civilizations of Mexico. The Aztecs, Mayas, and their predecessors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | Prerequisite(s): minimum 45 hours |
| ASB | 338 | Archaeology of North America | In-depth study of the origin, spread, and development of the prehistoric Indians of North America up to historic tribes. Does not include the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisites: ASB 102 or ASB 222 or ASB 223 |
| ASB | 344 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| ASB | 350 | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU | |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Pre-requisites: ASB 102, ASB 222, ASB 223 or ASM 104 or SSH 100 or ASB 100 with C or better. Credit is allowed for only SSH 355 or ASB 355 |
| ASB | 361 | Pleistocene Archaeology | Biosocial evolution in the Pleistocene, emphasizing technological achievements and the relationship between technology and environment in western Europe, sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | H | |

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| ASB | 362 | People and Plants | Offers a global survey of ethnobotany, the study of the uses of plants by people. Integrating botany, anthropology and archaeology, students learn about the roles plants have played as foods, tools, medicines and foci of religious devotion and ritual experience across human history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 45 hours |
| ASB | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Special study will be placed on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| ASB | 368 | Hunter-Gatherers | Studies of known hunting and gathering societies with the goal of developing approaches to understanding past and/or present hunting and gathering societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 45 hours |
| ASB | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB 370, SOC 370, SOS 370, or SSH 370 |
| ASB | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101,105 or 107 with C or better; Minimum of 45 hours completed; Credit is allowed for ASB 371, ASB 394 (Inequality and Sustainability), SOS 371 or SOS 394 (Inequality and Sustainability) |
| ASB | 375 | Environmental Anthropology | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and use their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ASB 100, ASB 102, SSH 100, SOS 100 or SOS 110; Minimum 45 hours; Credit is allowed for only ASB 375, ASB 394 (People: Environment Connections in Anthropology), ASB 494 (Ecological and Environmental Anthropology) or SOS 375 |
| ASB | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| ASB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 395 | Topics in Comparative Culture | In-depth study of specific topic(s) cross-culturally. Students engage with the subject matter through critical evaluation of literature, hands-on analysis and interpretation of data, and scientific writing. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 42 hours |
| ASB | 402 | Visual Anthropology | Explores visual anthropology as a method for social documentation, and as a way to interpret cultural ways of seeing. Brings together anthropology, fine art, and art history students to exchange ideas about how we create, interpret, and communicate visual meanings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| ASB | 412 | History of Anthropology | Historical treatment of the development of the culture concept and its expression in the chief theoretical trends in anthropology between 1860 and 1950. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | |
| ASB | 417 | Political Anthropology | Comparative examination of the forms and processes of political organization and activity in primitive, peasant, and complex societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 430 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisites: AML 100 or MAT 142, 170, 210, 265 or 270 with C or better OR Mathematics Placement Test score of 50% or higher; Minimum 56 hours. Credit for only ASB 430, CPI 430, or AML 330 |
| ASB | 443 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisite: SSH 100 or ASB 100. Credit is allowed for only ASB 443 or SSH 403 |
| ASB | 452 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only SSH 402 or ASB 452 |

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| ASB | 455 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| ASB | 462 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |
| ASB | 463 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 464 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| ASB | 466 | Peoples and Cultures of Africa | Surveys African peoples and their cultures, external contact, and changes. Meets non-Western requirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| ASB | 471 | Introduction to Museums | History, philosophy, and current status of museums. Explores collecting, preservation, exhibition, education, and research activities in different types of museums. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 480 | Principles of Linguistics | Descriptive and historical linguistics. Surveys theories of human language, emphasizing synchronic linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 481 | Language and Culture | Applies linguistic theories and findings to nonlinguistic aspects of culture; language change; psycholinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 483 | Sociolinguistics and the Ethnography of Communication | Relationships between linguistic and social categories; functional analysis of language use, maintenance, and diversity; interaction between verbal and nonverbal communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASB | 485 | U.S.-Mexico Border in Comparative Perspective | Explores the multicultural and social dimensions of communities along the U.S.-Mexico border, emphasizing social organization, migration, culture, and frontier ideology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 490 | Earliest Cities | Archaeological research on the origins and development of the earliest urban centers around the world. Applies urban theory and comparative analysis. Compares ancient and modern cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | Pre-requisites: ASB 222 or ASB 223 with C or better; Minimum 45 hours; Credit is allowed for only ASB 490 or PUP 490 |
| ASB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| ASB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. ASB 503/SSH 503. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields. Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 511 | Ethics in Health Social Science Research | Ethics and social justice issues in community-based health research relevant to health social science, including informed consent, community involvement, control, advocacy. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 513 | Research Design and Proposal Writing in Health Social Science | Research design, piloting, and proposal writing for social scientists conducting health research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|-------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ASB | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| ASB | 525 | Introduction to Material Culture | Considers how objects embody social relationships and therefore cultural meanings. Seminar explores theories that give insight into social processes such as exchange, consumption, and identity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 529 | Culture and Political Economy | Origin and spread of Western capitalism and its impact on non-Western societies. Utilizes ethnographic and historical case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 530 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ASB 530 or SOS 553 |
| ASB | 532 | Graduate Field Anthropology | Independent research on a specific anthropological problem to be selected by the student in consultation with the staff. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 2-8 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 537 | Topics in Mesoamerican Archaeology | Explores changing organization of pre-Columbian civilizations in Mesoamerica through interpretive issues, such as regional analysis, chiefdoms, urbanism, and exchange. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 540 | Scholarly Inquiry in Anthropology | Basic issues and concepts in anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student within one of the following programs in the School of Human Evolution and Social Change: Anthropology, Museum Anthropology, Social Science and Health, and Environmental Social Sciences |
| ASB | 541 | Theory in Sociocultural Anthropology | Basic issues and concepts in sociocultural anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 542 | Archaeology of Small-Scale Societies | Approaches to small-scale (i.e., hunter-gatherer and tribal) societies, archaeological method and theory, ethnography, models of human and cultural evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 544 | Settlement Patterns | Spatial arrangement of residences, activity sites, and communities over landscape. Emphasizes natural and cultural factors influencing settlement patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 547 | Origins of Agriculture | Archaeological evidence for transitions in Old World subsistence economies from hunting and gathering to dependence on domesticated plants and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 549 | Chiefdoms | Examines archaeological evidence of chiefdoms, distinguished by hereditary leadership and non-bureaucratized decision-making elite, to illustrate emergence of social complexity, inequality. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 558 | Mortuary Practices and Cultural Analysis | Critical overview of theory and methods of reconstructing lifeways of past peoples with ethnographic/archaeological data and a bioarchaeological perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 560 | Theory and Archaeology | Applies social theory to archaeological study of societies of the past. Includes practice theory, hierarchy, space and place, material culture. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 563 | Hunter-Gatherer Adaptations | Evolution of prehistoric hunter-gatherer societies in the Old and New Worlds from the most ancient times through protohistoric chiefdoms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 567 | Southwestern Archaeology | Broad coverage of Southwestern cultural developments focusing on current debates and rigorous use of archaeological data in making cultural inferences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 568 | Intrasite Research Strategies | Research issues within a single site context. Topics include quantitative spatial analysis, site definition, sampling, distributional analysis, and substantive interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 572 | Museum Collection Management | Principles and practices of acquisition, documentation, care, and use of museum collections; registration, cataloging, and preservation methods; legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ASB 573 or HST 573 |
| ASB | 574 | Exhibit Design and Development | Exhibition philosophies and development; processes of planning, designing, staging, installing, evaluating, and disassembling temporary and long-term exhibits. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 579 | Critical Issues in Museum Studies | Current debates of museum practice from an anthropological perspective. Addresses issues of collection, presentation, authenticity, and authority. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|----------------------------------------------------------------|
| ASB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | |
| ASB | 311 | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| ASB | 319 | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| ASB | 340 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |
| ASB | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| ASB | 346 | Marriage and Family Diversity | Social, economic, and cultural factors that shape family diversity in relation to generational and gender dynamics within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| ASB | 350 | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit for only ASB 374, POS 374, SBS 374 or SOC 374 |
| ASB | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| ASB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | 440 | Women in the Global Factory | Examines the impact of Third World women's incorporation into the new global division of labor in the late 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 442 | Urban Studies | Studies local and global urban issues such as social geography, political economy, culture and social space, urban social diversity. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 442 or SBS 460 |

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| ASB | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| ASB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| ASB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| ASB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ASC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASC | 315 | Numeracy in Technology | Contextual uses of mathematics in applied sciences. Emphasizes using mathematical methodologies to solve technology-related problems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): BAS major |
| ASC | 325 | Physical Sciences in Technology | Physical systems and their interrelationships on technology systems. Real-world applications of physical systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Pre-requisites: BAS major |
| ASC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: Polytechnic BAS student |
| ASC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| ASC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisites: Polytechnic BAS student |
| ASC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisites: Polytechnic BAS student |
| ASE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | Pre-requisites: Must be a non degree undergraduate student with less than or equal to 25 total earned hours |
| ASE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |

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| ASE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| ASE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |
| ASE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 104 | Bones, Stones, and Human Evolution | Physical anthropology and archaeology. Evidence and processes of human evolution and of culture change. Primates. Fossil hominids and their tools. Race, variation, and heredity. Environment and human biology. Prehistoric culture and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SB or SG | |
| ASM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| ASM | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201 or SSH 201 |
| ASM | 246 | Human Origins | History of discoveries and changing interpretations of human evolution. Earliest ancestors to emergence of modern humans. Humanity's place in nature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 275 | Forensic Anthropology | Discusses the role of the forensic anthropologist in medico-legal investigations involving skeletonized human remains. Includes forensic recovery techniques, identification of decedents through skeletal and dental analysis, and reconstructing the crime scene through analysis of trauma patterns. Covers the legal aspects of forensic practice and considers historical case studies and the contributions forensic anthropologists make to mass disaster investigations and human rights abuses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 300 | Anthropological Sciences Seminar | Focuses on the ways in which research findings are produced by diverse theories and methods in the anthropological sciences, usually in combination with other life and physical sciences, with a strong focus on combination anthropological conceptual frameworks with quantitative methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: BS in Anthropology major; Two of the following: ASB 102, 222 (or 223), AML 100, ASM 104 with a C or better |
| ASM | 301 | Peopling of the World | Reviews all evidence for human dispersal during the last 100,000 years, origins of language, cultures, races, and beginnings of modern humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisite: ASM 104 |
| ASM | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ASB 222; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| ASM | 338 | Anthropological Field Session | Anthropological field techniques, analysis of data, and preparation of field reports. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASM | 341 | Human Osteology | Osteology, human paleontology, and osteometry. Description and analysis of archaeological and contemporary human populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: ASM 104 with C or better; 25 minimum hours |
| ASM | 342 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| ASM | 344 | Fossil Hominids | The fossil evidence for human evolution, emphasizing the concepts and methods for reconstructing the past. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisite: ASM 104 |
| ASM | 345 | Disease and Human Evolution | Interaction of people and pathogens from prehistoric times to the present, with emphasis on disease as an agent of genetic selection. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ASM 104 or BIO 100 or BIO 181 (or BIO 188) or BIO 182 (or BIO 187) or BIO 281 or BIO 282 |
| ASM | 348 | Social Issues in Human Genetics | Moral and social implications of developments in genetic science, particularly as they affect reproduction, medicine, and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 350 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 (or 223), or GLG 101 (or 103), or GPH 111, with C or better |
| ASM | 365 | Doing Archaeology | Using hands-on analysis of artifacts and a mock site, this advanced introduction to archaeology acquaints the student with the field and laboratory methods applied by archaeologists, the information archaeologists use, and how they construct knowledge of the past. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Prerequisite(s): ASB 222 (or ASB 223 or 335 or 337) |
| ASM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |
| ASM | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| ASM | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only SOS 424, BIO 424, or ASM 424 |
| ASM | 435 | Archaeological Pollen Analysis | Theory, methodology, and practice of pollen analytic techniques. Compares uses in botany, geology, and archaeology. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASM | 443 | Primateology | Evolution and adaptations of nonhuman primates, emphasizing social behavior. Includes material from fossil evidence and field and lab studies in behavior and biology which must be critically integrated with relevant competing theories concerning the evolution of primate behavior and biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; Minimum 56 hours. Credit is allowed for only ASM 443 or 543 |
| ASM | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: BIO 340 or ASM 301 with C or better; Credit is allowed for only ASM 546, BIO 446 or 546 |
| ASM | 450 | Bioarchaeology | Surveys archaeological and physical anthropological methods and theories for evaluating skeletal and burial remains to reconstruct biocultural adaptation and lifeways. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 104 |
| ASM | 452 | Dental Anthropology | Human and primate dental morphology, growth, evolution, and genetics. Within- and between-group variation. Dental pathology and behavioral-cultural-dietary factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SG | Pre-requisites: ASM 104. Credit is allowed for only ASM 552 or ASM 452 |
| ASM | 453 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 or 223 with C or better; ASM 104 with C or better; Minimum 56 hours; Credit is allowed for only ASM 453 or 553 |
| ASM | 454 | Comparative Primate Anatomy | Functional anatomy of the cranial, dental, and locomotor apparatus of primates, including humans, emphasizing the relation of morphology to behavior and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| ASM | 455 | Primate Behavior Laboratory | Instruction and practice in methods of observation and analysis of primate behavior. Discusses the relationship between class work on captive animals and field techniques for studying free-ranging groups. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisite: ASM 343 |
| ASM | 456 | Infectious Disease and Human Evolution | Study of infectious disease and humanity, using evidence from anthropology, history, medicine, and ancient skeletons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 345 |
| ASM | 459 | Forensic Anthropology | Applies anthropology, primarily human osteology, to legal questions, including individual identification, crime scenes, forensic reports, police work, and court testimony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 341; ASM 275; Credit is allowed for only ASM 459 or 559 |

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| ASM | 460 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life; evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; ASM 341, ASM 342, ASM 344, ASM 345 or ASM 348 |
| ASM | 465 | Quantification and Analysis for Anthropologists | Statistical and quantitative strategies for envisioning and exploring archaeological, physical anthropological, bioarchaeological, and social/cultural data. Univariate and bivariate methods. A basic understanding of algebra is necessary to be successful in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | CS | |
| ASM | 472 | Archaeological Ceramics | Analysis and identification of pottery wares, types, and varieties. Systems for ceramic classification and cultural interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| ASM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 506, ASM 506 or MCB 506 |
| ASM | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 525 | Primate Paleobiology | Seminar-based survey of primate evolution, focusing on comparative biology of the extant primates and the fossil record through the Miocene. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 530 | Paleoanthropology | Seminar-based in-depth study of the fossil record of human evolution and its geological, environmental, and phylogenetic contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 543 | Primateology | Advanced study of nonhuman primate behavioral adaptations, emphasizing comparative sociality, incorporating data on behavior and biology from field and captivity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit allowed for ASM 443 or 543 |
| ASM | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); credit is allowed for only BIO 446, ASM 446, BIO 546 or ASM 546 |
| ASM | 548 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 552 | Dental Anthropology | Evolutionary anthropology of non-human primate and human dentition and research from extant and extinct species of non-human primates and hominins. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 452 or ASM 552 |
| ASM | 553 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 453 or 553 |
| ASM | 555 | Advanced Human Osteology | Intensive lab course covers identification of human skeletal remains and bone fragments from archaeological contexts. Emphasizes skeletal biology, variation, anatomical landmarks, determinants of age, sex, and stature. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisite: ASM 341 or Anthropology graduate student |

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| ASM | 560 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life; evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 565 | Quantitative Archaeology | Formal methods of structuring, codifying, and analyzing data for archaeological problems. Designing research to yield data amenable to productive analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 568 | GIS and Spatial Technologies in Anthropological Research | In-depth survey of spatial technologies in anthropological research, including GIS, spatial modeling, remote sensing, and image analysis and classification. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree or non-degree); Credit is allowed for only ASM, BIO, or SOS 570 |
| ASM | 573 | Lithic Analysis | Analysis and interpretation of chipped stone artifacts. Focus on both techniques and underlying concepts and their application to real collections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 611 | Paleopathology | Explores patterns of disease manifested in the human skeleton and differential diagnosis of infectious, metabolic, neoplastic, congenital, and other conditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); ASM 555 |
| ASM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 111 | Introduction to Solar Systems Astronomy | History, properties of light, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 112 | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 113 | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | 114 | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisite: Maximum 25 hours |
| AST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 321 | Introduction to Planetary and Stellar Astrophysics | Physical laws, celestial mechanics; properties of planets, the sun, and other stars; formation and evolution of stars and planetary systems. Both AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 or 271 with C or better; PHY 121 and 122 (or PHY 150) with C or better |
| AST | 322 | Introduction to Galactic and Extragalactic Astrophysics | Evolved stars, introduction to relativity, galaxies and interstellar matter, structure and dynamics of galaxies, cosmology. Both AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 (or MAT 271), PHY 150 (or PHY 121/122) with C or better |
| AST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 421 | Astrophysics I | Selected astrophysical topics, including stellar evolution, star formation, interstellar medium, galactic structure, extragalactic astronomy, high-energy astrophysics, and cosmology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 422 | Astrophysics II | Same range of astrophysical topics as for AST 421 but emphasizes different specific topics in a given year. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| AST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| AST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| AST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| AST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 521 | Stars and Interstellar Medium I | Radiative transfer, atomic and molecular properties, stellar atmospheres, line profiles, nonlocal thermodynamic equilibrium, interstellar gas and dust, star formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 522 | Stars and Interstellar Medium II | Stellar structure, radiative transport, boundary conditions, equations of state, nuclear reactions, opacity, nucleosynthesis, chemical evolution of the galaxy, stellar evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 523 | Stars and Interstellar Medium III | Structure of the interstellar medium, gaseous nebulae, recombination theory, ionization fronts and shock waves, galactic magnetic fields, magnetohydrodynamics, molecular clouds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 531 | Galaxies and Cosmology I | Structure and evolution of the Milky Way, stellar properties, populations and associations/clusters, interstellar medium, dark matter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 532 | Galaxies and Cosmology II | Structure of galaxies and the nearby universe, Hubble sequence, kappa-space, stellar populations, active galaxies, galaxy environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 533 | Galaxies and Cosmology III | Issues in modern cosmology, the distance scale, cosmological parameters, cosmological tests, cosmic background radiation, early universe, galaxy formation and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 111 | Introduction to Solar Systems Astronomy | History, properties of light, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| AST | 112 | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| AST | 113 | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | 114 | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |

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| AST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| AST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| AST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASU | 101-HNR | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1 | | Prerequisite(s): Barrett Honors student |
| ASU | 140-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 240-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 101-CPP | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1 | | Prerequisite(s): College of Public Service and Community Solutions |
| ASU | 140-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 240-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 101-BMI | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CHL | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CSHCD | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): College of Health Solutions major |

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| ASU | 101-NH | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| ASU | 140-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 240-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 101-CLS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): College of Letters and Sciences undergraduate student |
| ASU | 140-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 194-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | 240-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 394-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | 101-CS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): Cronkite School of Journalism and Mass Communication student |
| ASU | 140-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 240-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 101-HDA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): Herberger Institute of Design and the Arts student |
| ASU | 140-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 240-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 101-CHE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Chemical Engineering major |
| ASU | 101-CEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |

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| ASU | 101-CSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 101-CTI | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): College of Technology and Innovation student |
| ASU | 101-FSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 140-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 101-CON | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-EEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): undergraduate Electrical Engineering student |
| ASU | 101-BME | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering student |
| ASU | 101-IEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 240-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 101-MSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 101-AEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Aerospace Engineering undergraduate student |
| ASU | 101-MAE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering students or Aerospace Engineering undergraduate student |
| ASU | 101-MEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering undergraduate student |
| ASU | 101-LA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): College of Liberal Arts & Sciences student |
| ASU | 140-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 240-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 194-LA | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ASU | 101-TE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Teacher Education and Leadership student |
| ASU | 140-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 240-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 101-NCIAS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): New College of Interdisciplinary Arts and Sciences undergraduate student |
| ASU | 240-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 194-NCIAS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ASU | 140-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-18 | | |

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| ASU | 101-NU | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Healthcare Innovation or Nutrition student |
| ASU | 140-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 240-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 10 | Connect: ASU Orientation | Students enrolled in the Starbucks College Achievement Plan will learn about ASU's mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Online & Extended Campus | 0 | | |
| ASU | 11 | ASU Online Orientation | Students enrolled in ASU Online Orientation will learn about ASU and its mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Online & Extended Campus | 0 | | |
| ASU | 101-SOS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability student |
| ASU | 140-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 240-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 140-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 240-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 101-UC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Prerequisite(s): ASU Online students |
| ASU | 101-UC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Prerequisite(s): College of Letters and Sciences OR University College student |
| ASU | 194-UC | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | University College | Dean, University College | 1-4 | | |
| ASU | 150 | The LEAD Project I | Students develop in academic areas while also gaining essential career skills in creativity, problem solving, and teamwork. Students learn how to think critically and manage a project from inception to completion. Through course discussions and assignments, students examine connections between their work in other courses and ASU 150. This is the first part of a two-part curriculum which continues into the spring semester. Separate grades will be issued for each semester. | N | LEC | N | GNA | University College | University Academic Success Programs | 1 | | Credit is allowed for only ASU 150 or ASU 194 (The LEAD Project I) or UNI 120 |
| ASU | 19 | Jump Start | One-week program for incoming first-year students to ASU and is designed to set them up for academic success. Introduces the tools and processes that support their journey. Students learn how to connect with other students via collaborative environments. | N | LEC | N | YGB | University College | University Academic Success Programs | 0 | | Prerequisite(s): Jump Start or SPIRIT student |

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| ASU | 101-WPC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): W.P. Carey student |
| ASU | 140-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 240-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ATC | 230 | Fundamentals of Air Traffic Management | Introduces the manuals, procedures, maps, charts, and regulations used by air traffic controllers in the National Airspace System (NAS). | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 201 with C or better |
| ATC | 331 | Tower Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in ATC towers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 332 | TRACON Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA TRACONs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 333 | En Route Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA ATC En Route Centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 431 | Tower Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 331 with C or better |
| ATC | 432 | TRACON Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 332 with C or better |
| ATC | 433 | En Route Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 333 with C or better |
| ATC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Minimum junior standing |
| ATC | 491 | Air Traffic Management Capstone | Overview of problem solution tools, quality metrics, and current technology initiatives related to air traffic management and related industry problems in a project environment. Student projects focus on airport and airspace requirements. Student teams work with partners from industry, government, and academia to define project objectives and work toward a formal recommendation to help solve the specified problem. Class discussions focus on project management, organizational structures, strategic initiatives, strategy implementation and execution. Uses review and analysis of current industry problems and resolutions to provide examples of practical solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: ATC 331, 332 and 333 with C or better; Pre/Co-requisite: ATC 431, 432, 433 with C or better if completed |
| ATE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 361 | Building Structures I | Introduces load distribution on structures. Static analysis of determinant beams, trusses, arches, and rigid frames. Computer applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisite: ADE 321 |
| ATE | 362 | Building Structures II | Strength of materials. Stresses in beams and columns. Thermal effects on structures. Analysis, design, and detailing of wood structural systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 361 with C or better |
| ATE | 451 | Building Systems I | Principles of solar radiation, heat and moisture transfer, and environmental control systems as form influences. Energy-conscious design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 421 |
| ATE | 452 | Building Systems II | Architectural design implications of heating, ventilation, and air conditioning systems. Principles of lighting, daylighting, and acoustics, and their applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 451 with C or better; Co-requisite: ADE 422 |
| ATE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ATE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| ATE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |

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| ATE | 521 | Building Environmental Science | Scientific principles relating to comfort and environmental control. Heat and moisture transfer. Solar/natural energies for heating, cooling, and lighting. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 550 | Passive Heating and Cooling | Theory, analysis, and application of passive and low-energy systems in order to maximize comfort and minimize energy consumption in buildings. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 553 | Building Systems III | Design and integration of building systems, including mechanical, electrical, plumbing, security, communications, fire protection, and transportation. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisite: ADE 521; ATE 563 |
| ATE | 556 | Building Development | Comprehensive design development through the understanding and integration of building materials and systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 522 and APH 505 |
| ATE | 560 | Building Energy Analysis | Computer simulation of building thermal behavior. Software review. Detailed study of selected simulation models using case study projects. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 562 | Experimental Evaluation | Instrumentation, measurement and computational techniques for analysis of building components, and assessment of thermal and luminous performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 563 | Building Structures III | Analysis, design, and detailing of steel buildings and frames. Lateral analysis of small rigid and braced frame systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student |
| ATE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 582 | Environmental Control Systems | Heating, ventilation, and air-conditioning systems. Loads, psychrometrics, refrigeration cycle, air/water distribution, controls, energy performance standards, and utility rates. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ATE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AVC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |

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| AVC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CHM 231 with C or better OR Pre/Co-requisites: CHM 234 or CHM 334 (with C or better if completed); Credit is allowed for only BCH 361 or 461 |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 231 with C or better OR Pre/Co-requisites: CHM 234 or CHM 334 (with C or better if completed); Credit is allowed for only BCH 361 or 461 |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCH | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. May be repeated for total of 6 semester hours. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 461 | General Biochemistry | Structure, chemistry, and metabolism of biomolecules and their role in the biochemical processes of living organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234 or 334 with C or better; Co-requisite: CHM 341 or 346 with C or better if completed; Credit is allowed for only BCH 361 or 461 |
| BCH | 462 | General Biochemistry | Continuation of BCH 461. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: BCH 461 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BCH | 463 | Biophysical Chemistry | Principles of physical chemistry as applied to biological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 341 or CHM 346 with C or better |
| BCH | 464 | Biophysical Chemistry Laboratory | Introduces physical methods in modern biochemistry. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: BCH 467 with C or better; Pre/Co-requisite: BCH 463 with C or better if completed |
| BCH | 465 | Protein and Nucleic Acid Biochemistry | Structure and function of proteins and nucleic acids, including protein folding, enzymology, proteomics, DNA/RNA structure, replication, transcription, and genomics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: BCH 461 with C or better; Co-requisite: BCH 462 |
| BCH | 467 | Analytical Biochemistry Laboratory | Quantitative analysis, separation and purification of biological molecules. Applies chemical and physical methods to the characterization of biological macromolecules. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | L | Pre/Co-requisite: BCH 462 with C or better if completed |
| BCH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | |
| BCH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BCH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BCH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-7 | | |
| BCH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 501 | Current Topics in Biochemistry | | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: Graduate students (degree and nondegree). Credit is allowed for only BCH or CHM 520 |
| BCH | 561 | Advanced Topics in Biochemistry | Topics selected from emerging areas of biochemistry based primarily on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 568 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 353 (or LSC 353) with C or better; CHM 231 or CHM 234 or CHM 334 with C or better; Credit is allowed for only BCH 361 or 461 (or LSC 366) |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 354 (or LSC 355); Pre- or Co-requisites: BCH 361 or LSC 366 (with C or better if completed) |
| BCH | 371 | Modern Concepts in Biochemistry | Detailed examination of the chemical structure, conformation, and function of proteins, carbohydrates, lipids, and nucleotides; analysis of the energetics, enzymes, and control of the metabolic pathways by which these molecules are degraded or synthesized. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353; CHM 234; Credit is allowed for only BCH 371 or LSC 394 (Modern Concepts in Biochemistry) |
| BCH | 372 | Modern Concepts in Biochemistry Laboratory | Analyzes protein structure, purification, and function using spectroscopic, chromatographic, and electrophoretic methods. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: BIO 354; Pre/Co-requisite: BCH 371; Credit is allowed for only BCH 372 or LSC 394 (Modern Concepts in Biochemistry Laboratory) |
| BCS | 101 | Elementary Serbo-Croatian | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 102 | Elementary Serbo-Croatian | See BCS 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 201 | Intermediate Serbo-Croatian | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 202 | Intermediate Serbo-Croatian | See BCS 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 311 | Bosnian/Croatian/Serbian Composition and Conversation I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 202 with C or better; Credit is allowed for only BCS 311, 394 (Serbo-Croatian Conv & Comp I) or SLC 394 (Serbo-Croatian Comp/Conv) |
| BCS | 312 | Bosnian/Croatian/Serbian Composition and Conversation II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 311 with C or better; Credit is allowed for only BCS 312 or 394 (Bosnian/Croatian/Serbian Composition and Conversation II) |
| BCS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| BCS | 495 | Serbo-Croatian for Heritage Speakers | Generates professional proficiency by developing communicative and written competency in standard literary Serbo-Croatian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |
| BDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 692 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BDE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 701 | Fundamentals of Biological Design I | Training in the essentials of fields underlying interdisciplinary research in the biosciences and in the integration of multiple disciplines in use-inspired research. Modules concentrate on key concepts and current questions in the biological sciences, physical sciences, and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 702 | Fundamentals of Biological Design II | Emphasizes the integrative areas of computational bioinformatics, systems biology, and synthetic biology, and their application in biomedical research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 721 | Integrative Research | Develops comprehensive solutions to societal problems by small interdisciplinary teams of students, including a proposal for research in an integrated science area. Covers issues of intellectual property, commercialization, societal impact and value, project management, product design, and historical examples of disruptive technological innovations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BDE | 722 | Research Design | Writing and presentation of a research proposal in the form of a grant application, peer review sessions to provide feedback, examination of the grant review and funding process. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 751 | Teaching in Science | Guidance in teaching and exposition through assisting a faculty teaching mentor in the Biological Design core course and training in oral presentation skills, including instruction in how to effectively present posters and seminars and participation in outreach experiences in the community. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | 351 | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: BIO 340 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 482 | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 480 with C or better |
| BIO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |

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| BIO | 112 | Discovery: Why Sex? | "Why?" is a question that animates the youngest of children to the most seasoned of scientists. The acts of asking and answering "Why?" highlight the integrated nature of scientific knowledge and discovery. Demonstrates scientific disciplines are not walled cities in which knowledge is neatly segregated from lines of inquiry and knowledge in other disciplines. Instead, scientific concepts weave throughout and between disciplines and scientists increasingly rely on colleagues from different scientific fields to find answers to scientific questions. So our journey to find responses to the question "Why Sex?" takes us not just to biology, but also to earth science and to physics. Along the way, scientists are linked together not only through concepts that crosscut the disciplines, but also in their reliance upon key scientific skills such as the ability to observe, think critically, measure, gather data and communicate their findings. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Credit is allowed for only BIO 112 or BIO 194 (Discovery: Why Sex?) |
| BIO | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 151 | Biological Thinking | The science behind the science of life. Masters the core concepts of modern biology, understands the scientific discoveries that lie behind those concepts, and develops scientific reasoning skills so that students can contribute discoveries of their own. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Pre-requisite: Life Sciences student with a math placement score below 50; Credit is allowed for only BIO 100 or BIO 151 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 189 | Life Sciences Career Paths | Overview of modern life sciences, including research trends, extracurricular opportunities, degree programs, and potential careers. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): Freshmen School of Life Sciences majors |
| BIO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| BIO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 281 | Conceptual Approaches to Biology for Majors I | Covers the themes and concepts that underlie the molecular biology of cells and multicellular organisms as well as the biological processes that shape the diversity of organisms on our planet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Prerequisite(s): School of Life Sciences student; Pre- or corequisite(s): STP 226 (or 231) with C or better if completed. Credit is allowed for only BIO 181, 182 or 281 |
| BIO | 282 | Conceptual Approaches to Biology for Majors II | Builds upon established conceptual foundations, covers the themes and concepts underlying organismal biology, with an emphasis on physiology and ecology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): School of Life Sciences student; BIO 281; Pre- or corequisite(s): MAT 210, 251, 265 or 270; Credit is allowed for only BIO 181 or BIO 182 or BIO 282 |
| BIO | 289 | School of Life Sciences Undergraduate Research Apprentice | Students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development in this seminar. Enriches individual lab research experiences students by bringing them together in a peer-community environment. Introduces students to the resources they have at their disposal (e.g. on campus, online) to facilitate research productivity and career planning. Rigorously evaluates their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Co-requisite: BIO 310, or BIO 494 (Advanced Study Practicum), or BIO/HPS/MBB/MIC/PLB 484/492/493/495/496/499, or MIC 401 |
| BIO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 302 | Cancer--Mother of All Diseases | History of cancer; disease statistics; pathogenesis; diagnosis, treatment and prevention; case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): BIO 181 and 182 (or BIO 282) with C or better |
| BIO | 310 | Special Problems and Techniques | Qualified undergraduates may investigate a specific biological problem under the direction of a faculty member. | N | IND | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 311 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |

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| BIO | 312 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312, IAS 340, or PHI 320 |
| BIO | 314 | Research Colloquium in Biology and Society I | Develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisites: BS Biology and Society Concentration majors; BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 315 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite: ENG 102, 105, or 108 with C or better. Minimum 35 hours. Credit is allowed for only ENG 370 or BIO 315 |
| BIO | 316 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| BIO | 318 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| BIO | 319 | Environmental Science (Nonmajor) | Environmental and biological concepts applied to ecological systems with a specific focus on analysis of problems caused by humans. Cannot be used for major credit in the Biological Sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | G | Pre-requisite: Junior class standing; Credit is allowed for only BIO 319 or PLB 320 |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | 321 | Introductory Ecology Laboratory | Lab and field observations and experiments to test current concepts and theories in ecology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 320 with C or better if completed |
| BIO | 322 | Conservation Biology and Ecological Sustainability | Species-level approaches to the protection, management, and restoration of biological resources from scientific and policy perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 323 | Ecosystem Restoration and Management | Ecosystem-level approaches to the protection, management, and restoration of biota and ecosystem processes from local to global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 324 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Credit is allowed for only BIO 324 or PHI 310 |
| BIO | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| BIO | 327 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| BIO | 331 | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better. Credit is allowed for only BIO or LSC 331 |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 342 | General Genetics Laboratory | Explores general principles of inheritance with special reference to Mendelian, molecular, and computational genetics via lab experiments. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 340 (with C or better if completed) |
| BIO | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisite: MBB 347 or BIO 340 with C or better; Credit is allowed for only BIO or MBB 343 |
| BIO | 344 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | 346 | The Darwinian Revolution | Intellectual and cultural history of Darwinism and modern evolutionary theory and their impact on 19th- and 20th-century thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |
| BIO | 349 | Molecular Genetics: Genes and Proteins | Emphasizes molecular and cell biology and gene technology, both at the basic and applied research levels, in the growing areas of biotechnology and the molecular biosciences; focuses on molecular processes that allow genetic information to be expressed and regulated and by introducing applications to real-world situations. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 282 (or BIO 181 and 182); CHM 116. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |

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| BIO | 351 | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better |
| BIO | 352 | Laboratory in Vertebrate Developmental Anatomy | Morphology of representative embryonic and adult vertebrates. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Pre/Co-requisite: BIO 351 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 or STP 231, or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CFI 480 or MBB 355. |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 361 | Animal Physiology Laboratory | Experimental lab studies of physiological mechanisms in animals and model systems. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 360 (with C or better if completed) |
| BIO | 370 | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 385 | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 386 | General Entomology | Specialized focus on form, activities, and classification of insects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 389 | School of Life Sciences Undergraduate Researcher | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment; introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): School of Life Sciences majors; 3.00 GPA |
| BIO | 390 | Medical/Dental Field Placement | Field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 406 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| BIO | 410 | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | 411 | Quantitative Methods in Conservation and Ecology | Quantitative methods in conservation ecology; develop mathematical models of ecological and natural resource systems and use the models to better understand and inform management of ecosystems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 320 (or BIO 322) with C or better; BIO 415 (or STP 226 or 231) with C or better; and MAT 251 with C or better |
| BIO | 412 | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | 414 | Research Colloquium in Biology and Society II | Further develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Pre-requisites: BIO 314 with C or better |
| BIO | 415 | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | 416 | Professional Values in Science | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: Grade of C or better in: BIO 187 (or both PLB 200 & PLB 201) and BIO 188. Students who have credit for HPS 410, may not enroll in BIO 416 |
| BIO | 417 | Experimental Design | Fixed, random, mixed models; crossed and nested factorial designs; balanced and unbalanced data; completely randomized, blocked, repeated measure designs; ANCOVA. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 415 with C or better |
| BIO | 418 | Soil Ecology | Soils viewed in an ecosystem context, soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: ABS 370 or BIO 320. Credit is allowed for only ABS 434 or BIO 418 |
| BIO | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only PLB 419, 519, BIO 419 or 519 |

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| BIO | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| BIO | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 422 | Ecosystem Ecology | Explores the structure, development and dynamics of ecosystems, with a focus on the exchange of energy and materials between the atmosphere, soils, water, biosphere, and anthro-sphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 422 or BIO 494 (Ecosystem Ecology) |
| BIO | 423 | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |
| BIO | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ASM, BIO or SOS 424 |
| BIO | 425 | Marine Conservation Ecology | Marine conservation biology is increasingly important for society, as evidenced by frequent media coverage and the recent report by the U.S. Commission on Ocean Policy. Expect exposure to multiple perspectives on important conservation issues in the marine environment and gain valuable experience in critical thinking, communication skills, and the use of science in effective debate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181,182 with C or better OR BIO 281, 282 with C or better. Credit is allowed for only BIO 425 or BIO 494 (Marine Ecology and Conservation) |
| BIO | 426 | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 427 | Fire | A survey of fire on Earth—history, ecology, behavior, and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 428 | Biogeography | Environmental and historical processes determining distributional patterns of animals and plants, emphasizing terrestrial life. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 431 | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 117 or higher or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| BIO | 435 | Research Techniques in Animal Behavior | Experimental and field studies of animal behavior; description and quantification of animal behavior and interpretation of behavior within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 331 with C or better |
| BIO | 436 | Sociobiology and Behavioral Ecology | Surveys animal and human social behavior examined from ecological and evolutionary perspectives using theoretical and empirical constructs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 331 with C or better |
| BIO | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 with C or better; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| BIO | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 340 or ASM 301 with C or better; Credit is allowed for only ASM 546, BIO 446 or 546 |
| BIO | 450 | Advanced Developmental Biology | Current concepts and experimental methods involving differentiation and biosynthetic activities of cells and organisms, with examples from microorganisms, plants, and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 351 with C or better |
| BIO | 451 | Cell Biotechnology Laboratory | Mammalian cell culture techniques, including mouse embryonic stem cells, the use of bioreactors, cell fractionation, and digital video imaging. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 353 (or MBB 245) with C or better |
| BIO | 453 | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |
| BIO | 455 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BMI 465 or BIO 455 |

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| BIO | 456 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better; Credit is allowed for only BMI 466 or BIO 456 |
| BIO | 461 | Comparative Animal Physiology | A comparative approach to understanding the function of animal physiological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 462 | Endocrine Physiology | Mechanisms of action of hormones; endocrine control of homeostasis, growth, stress responses, and reproduction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 464 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| BIO | 465 | Neurophysiology | Detailed treatment of cellular and organismal neurophysiology and nervous system function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 467 | Neurobiology | Introduces major areas of neurobiology, from fundamental cellular and molecular processes through systems neuroscience and neural bases of behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 469 | Computational Neuroscience: Case Studies in Neuroethology | Introduces the use of computational methods for understanding neural function at the cellular, circuit, and systems levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 360 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 472 | Mammalogy | Classification, structure, habits, ecology, and distribution of mammals, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 473 | Ichthyology | Systematics and biology of recent and extinct fishes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 474 | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 482 | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BIO | 489 | School of Life Sciences Undergraduate Research Fellow | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment; introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): School of Life Sciences majors; 3.50 GPA |
| BIO | 490 | Surgical Field Placement | Advanced field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 390 with C or better |
| BIO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| BIO | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, MIC, MBB, HPS or PLB 496 |
| BIO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| BIO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 502 | Transmission Electron Microscopy | Theory, use, and methods of preparing biological materials for transmission electron microscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Pre/Co-requisites: BIO 504 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 504, MCB 504, or BIO 598 Special Topic: Bioimaging Current Techniques; Credit is allowed for only BIO or MCB 503 |
| BIO | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| BIO | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Pre-requisites: Graduate student; Credit is allowed for only ASM, BIO or MCB 506 |
| BIO | 515 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| BIO | 516 | Foundations of Bioethics | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| BIO | 518 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 518 or HPS or HST 516 |
| BIO | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 519, PLB 419 or PLB 519 |
| BIO | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 522 | Populations: Evolutionary Ecology | Principles of population biology and community ecology within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 527 | Environmental Ethics and Policy Goals | Advanced seminar in applied environmental ethics, focusing on the most influential and policy-relevant approaches in the field of environmental ethics. Core topics include the historical and philosophical foundations of alternative understandings of environmental responsibility; the debate over utility and preservation in environmental policy argument; and the interplay of ethical principles, scientific knowledge and societal priorities in environmental decision making. Consideration of the ethical and value dimensions of biodiversity conservation, wilderness protection, environmental valuation, environmental activism, climate change and sustainability, among other challenges. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 527 or SOS 527 or BIO 591 (Environ Ethics & Policy Goals) |

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| BIO | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 530 | Scientific Teaching | Guides graduate students to better understand issues related to undergraduate learning in science courses, and prepares students to become more effective teachers. Topics focus on emerging research that supports active and student-centered learning activities as well as methods that include the 5Es, concept-mapping, and "backward" design. Students reflect on their own teaching philosophy, and begin building an ePortfolio documenting and validating their ability to teach effectively. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 530 or 591 (Scientific Teaching) |
| BIO | 531 | Advanced Scientific Teaching | Further develops the teaching abilities of graduate students by applying knowledge into the more advanced teaching activities including large class sizes, diverse student populations, online delivery, and technology-integrated teaching. Students have more in-depth practice fully developing lesson plans, assessments and other teaching activities based on the concepts of evidence-based teaching. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 531 or BIO 594 (Advanced Scientific Teaching) |
| BIO | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 543 | Molecular Genetics | Nature and function of the gene; emphasizes the molecular basis of inheritance and gene expression in prokaryotes and eucaryotes. Knowledge of general genetics recommended before registering for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 545 | Populations: Evolutionary Genetics | Mathematical models in the description and analysis of the genetics of populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 446, 546, BIO 446 or 546 |
| BIO | 549 | Phylogenetic Biology and Analysis | Basic theory and general concepts of phylogenetic inference as well as practical, hands-on experience with many of the commonly used methods for inferring and interpreting phylogenetic trees. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 552 | Developmental Genetics | Genetic approaches to the analysis of development during the life cycle of eukaryotic organisms, and the role of genes in the unfolding of the differentiated phenotype. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ABS, BIO 560 or MAT 561 |
| BIO | 564 | Cellular Physiology and Signaling | Emphasizes the molecular basis for cell structure, function and intercellular signaling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM, BIO, or SOS 570 |

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| BIO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 610 | Introduction to Responsible Conduct of Research (RCR) in Life Sciences | Introduces ethical and regulatory issues in the nine core areas of responsible conduct of research. Discusses real and hypothetical cases that tie broad ethical considerations to current concern of scientists. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 611 | Current Topics in Responsible Conduct of Research (RCR) in Life Sciences | Explores a single topic in the responsible conduct of research in depth. Topic changes depending on current issues in responsible conduct of research as well as the interests of the instructor and students. Possible topics include: responsible authorship; conflicts of interest; human subjects research; and misconduct, data management, and academic integrity. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| BIO | 614 | Biometry | Fundamental concepts of statistics and how to apply a range of standard statistical tools to the analysis of biological data. Uses the software applications SPSS and R to carry out these tests, and how to identify the particular situations in which each test is appropriate. Topics include: basic probability, descriptive statistics, estimation, hypothesis testing, t-tests, analysis of variance, regression, correlation, chi-square analysis, randomization tests, and nonparametric statistics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only BIO or HPS 620 |
| BIO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BIO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| BIO | 113 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. Cannot be used for major credit in the biological sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 113 or LSC 294 t 2 (Dinosaurs) |
| BIO | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 130 or ABS 130 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. Cannot be used for major credit in the life sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 300 | Natural History of Arizona | Plant and animal communities of Arizona. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SG General Studies credit | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG | |
| BIO | 301 | Field Natural History | Organisms and their natural environment. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SG General Studies credit | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | Pre/Co-requisites: BIO 300 or LSC 310 with C or better if completed |
| BIO | 305 | Biology Behind the Crime Scene | Explores biological technology behind forensic techniques like fingerprinting, Polymerase Chain Reaction (PCR), and paternity testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: Minimum Sophomore standing |
| BIO | 306 | Modes of Biological Thought | Involves students in the process of biological discovery to examine how we identify truth in biological science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG101 or ENG 105 with C or better; BIO181 (or BIO188) and BIO182 (or BIO187) with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 307 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy, and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. Weekend field trip required. Cannot be used for major credit in the biological sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisite: Minimum sophomore standing; Credit is allowed for only BIO 307 or LSC 294 (Dinosaurs) |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow, biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 113 and 116 with C or better |
| BIO | 331 | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better. Credit is allowed for only BIO or LSC 331 |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 340 or LSC 347 with C or better; CHM 116(or 115) with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites with C or better: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 OR MBB 245 and 247; CHM 113 and 116 (or CHM 117 and 118) |
| BIO | 354 | Cell Biology Laboratory | Investigational lab using modern molecular and cellular techniques to analyze molecular, biochemical, and anatomical traits of cells. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisite: LSC 353 or BIO 353 (with C or better if completed) |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 370 | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 385 | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 393 | Careers in Natural and Health Sciences | This seminar course is designed to provide students with proficiency in analyzing career options and to help students explore the full range of careers that are open to those who major at the undergraduate level in the natural sciences. The course will include short presentations by professionals in a variety of fields, including environmental biology, biotechnology, business, education, and various health sciences. There will be ample opportunities for questions and personal interactions. | N | LEC | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 188 or BIO 182; Minimum 45 hours |
| BIO | 410 | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | 412 | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | 415 | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | 423 | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |
| BIO | 426 | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 431 | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 443 | Applied Molecular Genetics and Genomics | Nature and function of the gene; emphasizes the molecular genetic disease states; molecular biology; regulation of gene expression; genomics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: LSC 347 with C or better; CHM 233 or 331 with C or better; CHM 237 or 335 with C or better |
| BIO | 453 | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 473 | Ichthyology | Systematics and biology of recent and extinct fishes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 474 | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |

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| BIO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| BIO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| BIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 300 | Theories and Applications of Organizational Studies | Critical analysis and application of organizational theory and conceptual perspectives to identify and solve problems, emphasizing personal and organizational application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum sophomore standing |
| BIS | 301 | Foundations of Interdisciplinary Studies | Introduces concepts and methods of interdisciplinary study by critically examining anticipated 21st-century workplace and civic trends. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: Interdisciplinary Studies student; Minimum 2.00 GPA; Activation of BIS eligibility student group by a BIS advisor; One course meeting general studies MA requirement |
| BIS | 302 | Interdisciplinary Inquiry | Explores interdisciplinarity and integration as applied to various approaches of human inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Interdisciplinary Studies student; minimum 2.0 GPA ; BIS 301 with C or better; one course meeting general studies MA requirement |
| BIS | 340 | Organizational Skills | Develops and enhances skills needed in effective organizations such as communication and the use of technology. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): minimum junior standing or minimum 56 hours |
| BIS | 343 | Social Processes in Organizations | Examines the interdisciplinary nature of social processes and human interactions across a number of different organizational contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum junior standing or minimum 56 hours |
| BIS | 345 | Organizational Ethics | Explores and considers normative and applied ethics within a variety of organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum junior standing or minimum 56 hours |
| BIS | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours. Credit is allowed for only BIS 350 or OGL 350 |
| BIS | 353 | Interdisciplinary Leadership | Offers interdisciplinary perspectives on the theory and practice of leadership in a range of organizational environments | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): Minimum junior standing |
| BIS | 357 | Assessment in Organizations | Considers the role and function of assessment in effective organizations. Provides the knowledge and tools required to identify, collect and analyze information to assess organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): MAT 117 (or any course with General Studies MA designation); minimum junior standing or minimum 56 hours |
| BIS | 360 | Organizational Contexts | Explores how organizations function by analyzing in depth a specific organizational context like health care, family, education, government, community, religion or the economy. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum junior standing or minimum 56 hours |
| BIS | 370 | Dimensions of Liberal Studies | Critical analysis and application of concepts of liberal studies and its modes of inquiry. Prerequisite: BLS student; sophomore status; completion of first-year composition. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; Sophomore status; ENG 102, 105 or 108 with C or better |
| BIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 401 | Applied Interdisciplinary Studies | Applies interdisciplinary problem-solving skills in internships, service-learning, or research; may involve individual or group projects combining both concentrations. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies student; Minimum 2.0 GPA; BIS 301 with C or better; BIS 302 with C or better |
| BIS | 402 | Senior Seminar | Capstone course helps integrate classroom and experiential learning. Students choose among course topics that address their interests. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): Interdisciplinary Studies student; Minimum 2.0 GPA; BIS 301 with C or better; BIS 302 with C or better |
| BIS | 470 | Liberal Studies Seminar | Advanced analysis and application of theories and methods of human and social inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; BIS 370 with C or better; Senior status; ENG 102, 105 or 108 with C or better |
| BIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| BIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | OP4 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |

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| BIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| BLE | 220 | Foundations of Structured English Immersion | Examines current educational practices and historical legal issues. Prepares teacher candidates with a provisional Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| BLE | 322 | Reading Methods in BLE/ESL Settings | Instructional/assessment strategies, including systematic, research-based phonics, vocabulary, comprehension, spelling, writing, phonemic writing in Spanish/English. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 324 | Social Studies for Diverse Language Classrooms | Social studies education standards, curriculum, and instructional strategies for English language learners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 335 | Language Diversity in Classrooms | Issues in sociolinguistics and language variation in schools with a focus on classroom interaction, instruction, curriculum, assessment, and language policy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 220; Admission to Professional Teacher Preparation Program |
| BLE | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 396; Admission to Professional Teacher Preparation Program |
| BLE | 400 | Principles of Language Minority Education | Overview of philosophical and theoretical foundations of bilingual education and ESL models of instruction. Other topics include significant legislative and judicial measures. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 407 | SEI for Secondary Students | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the 7-12 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 408 | SEI for Linguistically Diverse Learners | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the K-8 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 411 | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 412 | Mathematics Curriculum, Instruction and Assessment in BLE/ESL Settings | Teaching, management, and assessment of mathematics in K-8 BLE/ESL settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 413 | Language Arts in BLE/ESL Settings | Literacy and language arts instruction; assessment of reading and writing; transition literacy skills, particularly critical reading of content. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 478 | Student Teaching in Diverse Language Classrooms | Student teaching in diverse language classrooms. Focuses on use of English language learning and bilingual strategies; integrates all previous course work. Synthesized experience in curriculum instruction and classroom management in a BLE/ESL setting. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 481 | Reading Practicum | Applies concepts from BLE 414. Supervised school-based experiences in teaching reading to BLE/ESL students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| BLE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BLE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 496 | Field Experience III | Applies course content in a bilingual/ESL school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| BLE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BLE | 511 | Introduction to Language Minority Education | Historical, philosophical, theoretical, and pedagogical foundations of language minority education in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 515 | Instructional Methods for Bilingual Students | Introduces general dual language teaching approaches. Focuses on the effective teaching of limited English proficient populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 520 | ESL for Children | Examines approaches to second-language development for children congruent with recent research in second-language acquisition in children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 522 | Literacy/Biliteracy Development | Acquaints teachers with first- and second-language literacy research, practice, and assessment in elementary school settings (Spanish-English emphasis) | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 527 | SEI for Middle and Secondary Schools | Prepares middle and secondary teachers and administrators in the areas required for Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 529 | Language Assessment and Evaluation of ESL/BLE Students | Assessment and evaluation of linguistic minorities; test theory, score interpretation; culturally responsive assessment; assessment of language and school achievement. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 533 | Literacy in Secondary BLE/ESL Settings | Examines first- and second-language literacy research, practice, and assessment across content areas in secondary school settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 535 | Sociolinguistic Issues in Bilingual Education | Surveys major theoretical issues (e.g., language situations, communicative competence, language attitudes) interrelating language, social processes, and bilingual education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 537 | Language Structure Acquisition | Introduces linguistics and language acquisition. Grammatical theory; language use in educational contexts; first, second, and simultaneous language acquisition. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only BLE 537 or LIN 510 |
| BLE | 541 | Nature of Bilingualism/Second-Language Acquisition | Bilingual and second-language acquisition, with emphasis on children and adolescents. Stresses cognitive, social, and cultural aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 561 | Parent Involvement in Language Minority Education Programs | Examines issues, approaches, and strategies for improving parental and community involvement in the schooling of language minority children and youth. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 597 | Capstone | Reflective, experience-based integration of theory and practice; professional development for individuals working with English language learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MA English as a Second Language major |
| BLE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BLE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BMD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMD | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |
| BMD | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BMI major. Credit is allowed for only BMD 507 or BMI 507 or BMI 591 (Intro to Dgtl Img Processing) |
| BMD | 510 | Current Perspectives in Biomedical Diagnostics | Seminar course using external speakers who review the current state of the biomedical diagnostics industry in terms of technology, regulation or legal issues. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 511 or HCD 511 |
| BMD | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): BMI Graduate student; Credit is allowed for only BMD 550 or BMI 550 |

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| BMD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Biomedical Informatics Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| BMD | 667 | FDA Regulation | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OP6 | College of Health Solutions | Biomedical Informatics Program | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BMD 667 or LAW 667 |
| BMD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BME | 100 | Introduction to Biomedical Engineering | Introduces engineering design methods, experimental practices, data gathering, presentation and statistical analysis. Lecture/labs focus on device design and application, including hands-on experience. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Biomedical Engineering major |
| BME | 101 | Introduction to Biomedical Engineering I: Belief Systems in Engineering | Biomedical engineering is a highly interdisciplinary field with a mixture of basic science, design, and application. Reviews the process of building a knowledge base, including how we form belief systems (both founded and unfounded). Understands how the scientific process works to generate "true" knowledge of the world and the dangers of denying fact. Teaches how BME uses science as a belief system to generate innovations that improve our quality of life. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 102 | Introduction to Biomedical Engineering II | Guides the student through the transition from how knowledge is generated by the scientific process/method to how the bioengineer uses the engineering method, design tools, and interdisciplinary skill sets to translate relevant scientific and related knowledge to create new healthcare technological solutions, i.e., medical device solutions, to address unmet biomedical and health care needs for individuals, as well as for society as a whole. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Corequisite: BME 101 |
| BME | 103 | Introduction to Biomedical Engineering III: Product Design & Development | Hands-on training in and implementation of selected product design skills necessary to successfully conduct engineering medical device product design using best industry practices. Runs concurrently with BME 101 and BME 102, which introduce the underlying theory that connects the principles of the scientific method with engineering design method in the practice of biomedical product research and development (R&D). Provides the beginning biomedical engineer with a hands-on design experience that connects product design theory with product development best practices via student exposure to the core elements of the engineering design process--specifically prototype conceptualization and realization. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering major; Pre/Co-requisite: BME 101; Credit is allowed for only BME 103 or 194 (Introduction to BME III) |
| BME | 111 | Engineering Perspectives on Biological Systems | Biological concepts for the emerging engineer. Introduces biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Engineering student |
| BME | 112 | Engineering Perspectives on Biological Systems Laboratory | Introduces biological concepts for the emerging engineer in a lab setting: biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Engineering student |
| BME | 121 | Programming in Biomedical Engineering | Introduces computer programming in the context of scientific and engineering problem solving. Topics include loops, functions, pointers, data structures, and algorithms in the context of a biomedical problem. Culminates in an introduction to object-oriented programming, with a look at modern wireless (iPad and iPhone) devices for biomedical applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite: Biomedical Engineering student; Pre/Co-requisite: MAT 265 or MAT 270 |
| BME | 182 | Biomedical Engineering Product Design and Development I | Continuation of hands-on training and implementation of medical device product design and development skills; FDA-regulated U.S. and global medical device healthcare markets and opportunities, business development in regulated environments, medical product and project management planning, exempt and Class I medical devices, medical product component and device levels, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best-industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering BSE major |
| BME | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 200 | Conservation Principles in Biomedical Engineering | Applies bioengineering analysis and problem solving of mass, energy, and charge balances to medical and biological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): BIO 181, BIO 188 or BME 111 with C or better; CHM 114 (or CHM 116) with C or better; PHY 121 with C or better. Pre/Co-requisite: MAT 275 |
| BME | 201 | Anatomy & Physiology: Cell & Tissue Physiology | Introduces the major structural and functional characteristics of individual cells and tissues in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of basic cell and tissue systems in the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical engineering student; Pre/Co-requisites: BIO 181 with C or better if completed; CHM 114, 116 or 118 with C or better if completed |

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| BME | 202 | Anatomy & Physiology: Organs & Systems | Introduces the fundamental structural and functional characteristics of the major organs and systems in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of fundamental physiology of organs comprised of the five tissue types of the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 201 with C or better if completed; Credit is allowed for only BME 202 or 294 (A&P: Tissues) |
| BME | 203 | Anatomy & Physiology: Lab | Laboratory introduction to the fundamental structural and functional characteristics of the major physiological systems in the mammalian body. Physiological principles in the context of biomedical problem solving in a lab. Describes how these systems interact in healthy and diseased biological states, and identifies how simple biomedical devices interface with these systems. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 201; BME 202; CHM 114, 116 or 118 with C or better if completed; Credit is allowed for only BME 203 or 294 (A&P: Systems) |
| BME | 211 | MATLAB & Mathcad in Biomedical Engineering | Introduces the basics of MATLAB and Mathcad programming in the context of biomedical engineering conservation of mass problem solving. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; CHM 114, 116 or 118 with C or better; BIO 181 with C or better; Pre/Co-requisites: PHY 131 or 151 with C or better if completed; MAT 274 or 275 with C or better if completed |
| BME | 212 | Conservation Principles | Basics of conservation principles in complex biological applications. Subsystem approaches to render a simplified approach to solving complex system problems with known and unknown variables. Application of MATLAB and Mathcad for solving conservation problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 211 (with C or better if completed) |
| BME | 213 | Biomedical and Bioengineering Ethics | Explores ethical issues in biomedical and medical sciences and engineering practices and includes professional ethics, medical ethics, engineering ethics and the Biomedical Engineering Society (BMES) Code of Ethics, the ethics of human and animal tissue and subjects use in biomedical science and engineering research, responsible conduct for research, ethical issues in the design and manufacture of medical devices for developing and developed countries, and the impact of biomedical engineering solutions on society and the environment. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 214 | FDA Regulatory Processes and Technical Communications | Develops writing skills to factually and effectively communicate all facets of biomedical product design and development activities that are required to successfully conceive, develop, and launch a medical device into the market place using the FDA quality systems best practices that are utilized by the health care technology industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): ENG 102, 105, or 108 with C or better if completed |
| BME | 235 | Physiology for Engineers | Physiology of the nervous, muscular, cardiovascular, endocrine, renal, and respiratory systems. Emphasizes use of quantitative methods in understanding physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering major; BIO 181, BIO 188 or BME 111 with C or better. CHM 114 or 116 with C or better; Pre/Co-requisites: PHY 131 and 132 |
| BME | 282 | Biomedical Engineering Product Design and Development II | Hands-on training and implementation of product design skills that combine virtual analytical model prototype development with component and sub-assembly integration to develop both virtual and physical prototypes of a medical device product at the product architecture level and verify selected product architecture specifications from design input and earlier design process verification steps. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering major |
| BME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| BME | 300 | Bioengineering Product Design | The fundamentals of financial and organizational structure of business and how it influences bioengineering analysis, design, and decision making; biomedical ethics and device and drug regulation; and fundamentals of business and technical management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering Junior, Senior or Post-Bac; BME 100 (or BME 101 and 102 and 103 OR BME 194 Introduction to BME I and II and III) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 301 | Numerical Methods in Biomedical Engineering | Applications of numerical methods to biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Biomedical Engineering student; MAT 274 (or MAT 275) with C or better |
| BME | 302 | Biomaterials/Physicochemical Properties | Introduces the science and engineering of biomaterials; addresses material properties of natural and artificial biomaterials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; PHY 121 (or PHY 150) with C or better. Pre/Co-requisite: BME 203 (with C or better if completed) |
| BME | 303 | Biological Response to Implanted Biomaterials | How biomaterials interact with surrounding tissue; biocompatibility. Also discusses specific clinical problems that are treated using implants. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 302 (with C or better if completed) |
| BME | 311 | Basic Concepts of Signals and Systems in Biomedical Engineering | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; EEE 202 with C or better; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 312 | Transforms for Biomedical Engineering Applications | Introduces properties of discrete and continuous transforms for the purpose of analyzing signals and applying the transforms to solve biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student. Pre/Co-requisite: BME 311 (with C or better if completed) |

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| BME | 313 | Preclinical and Clinical Trials in Biomedical Engineering | Explores the rationale and the tools required to evaluate the safety and efficacy of medical devices designed and developed using best industry practices for human consumption. Introduces the design and conduct of pre-clinical trials (in vitro, ex vivo or in vivo systems other than humans), as well as clinical trials that are required for FDA approval to market medical devices in the U.S. Covers the following topics: an overview of medical device development; FDA regulatory affairs and practices; ethics concerns in animal and human trials; experimental design and biostatistics for medical device preclinical and clinical studies; preclinical (IACUC) and clinical trial (IRB) approval; informed consent best practices; medical device preclinical and clinical trial management; recruitment of clinical study participants and populations; ethics of preclinical and clinical trials; and alternatives to animal and human trials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 213 or BME 294 (Biomedical and Bioengineering Ethics) with a C or better |
| BME | 318 | Biomaterials | Material properties of natural and artificial biomaterials. Tissue and blood biocompatibility. Uses of materials to replace body parts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering BSE student; CHM 114, 116, or BIO 181 (or BME 111 or BIO 188) with C or better; MAT 274 (or 275) with C or better |
| BME | 321 | Probability for Biomedical Engineering | Introduces probability distributions in the context of basic biological phenomena and biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 322 | Statistics for Biomedical Engineering | Introduces parametric and nonparametric statistics tests in the context of common biomedical experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering major; MAT 274 (or 275) with C or better |
| BME | 331 | Transport Phenomena for Biomedical Engineering | Transport phenomena with emphasis on momentum, energy, and mass transport in living systems, medical devices, and other therapeutic/diagnostic applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering student; BME 200, 212 or 294 (Conservation Principles) with C or better; MAT 274 (or 275) with C or better; PHY 121 with C or better |
| BME | 341 | Engineering Design Method | Covers the engineering design method, a collection of valuable design tools, and the application of the method and tools to address current problems in the field of biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 342 | 3D Spatial Modeling | 3D spatial modeling tools applied in the context of biomedical engineering to create computational models of idealized and anatomical biological structures (e.g., blood vessels). | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; BME 203 or 294 (Cell Tissue Physiology) or 294 (A&P: Tissues) or 294 (A&P: Systems) with C or better |
| BME | 350 | Signals and Systems for Bioengineers | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Biomedical Engineering major. Pre- or corequisite(s): MAT 274 (or MAT 275) with C or better |
| BME | 351 | Circuits for Biomedical Engineering Instrumentation | Circuits is a specialized skill that is developed for students interested in building devices which serve as electrical interfaces to the body. These are interfaces which have very specialized requirements. Students who have been familiarized with the basics of electrical circuit design as well as physiology learn some of the issues that arise and solutions that have been generated to provide for these interfaces. | N | LEL | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 312 or BME 394 (Transforms For BME Apps) with C or better |
| BME | 352 | Filtering of Deterministic and Stochastic Signals | Introduces properties of deterministic and stochastic signals and their use in biomedical signal processing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 312 or BME 394 (Transforms For BME Apps) with C or better if completed |
| BME | 353 | Microcomputing & Embedded Systems for Biomedical Engineering | Introduces the use of microcontrollers to analyze biological signals. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 352 (with C or better if completed) |
| BME | 361 | Design of Experiments and Clinical Trials | Explores advanced techniques in trial and experimental design in biomedical engineering, including testing new products or drugs, or even generation of new methods and treatments, designed to provide statistical confirmation at the end of trials. Design of trials, experiments, and measures, so that efficacy can be properly evaluated using statistical tests. Although this course makes reference to regulatory procedures, emphasizes the proper application of statistical techniques in the design of experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; BME 322 or BME 394 (Statistics For BME) with C or better |
| BME | 370 | Microcomputer Applications in Biomedical Engineering | Uses microcomputers for real-time data collection, analysis, and control of experiments involving actual and simulated physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering major; EEE 202 with C or better; Pre/Co-requisites: BME 350 |
| BME | 382 | Biomedical Engineering Product Design and Development III | Continuation of hands-on training and implementation of medical device product design and development skills; experimental practices, data gathering, presentation, and statistical analysis in regards to demonstration of validation and verification tools and testing, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: BME 282, or BME 213 and 214; credit is allowed for only BME 382 or BME 494 OR 598: Prototyping Dsn to Mkt |
| BME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |

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| BME | 401 | Biomedical Engineering Product Design & Development: Capstone | Introduces global biomedical engineering design factors that affect the selection and implementation of medical device product innovation, design, and development using best industry practices. These include technical, regulatory, economic, legal, business, entrepreneurial, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 313, BME 331, BME 341, BME 342, BME 353 and BME 361 with C or better |
| BME | 402 | Biomedical Engineering Product Design & Development: Capstone II | Introduces project management and product innovation, design and development processes and their best practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 401 (with C or better if completed) |
| BME | 403 | Biomedical Engineering Product Design & Development: Capstone III | Introduces conceptual product design and development best practices using three-dimensional modeling and other design tools for the determination of product specifications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 401 and 402 (with C or better if completed) |
| BME | 404 | Biomedical Engineering Product Design & Development: Capstone IV | Introduces entrepreneurial biomedical product development business practices for successful quality systems premarket submission of a verified detailed medical device design of a capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 403 or BME 494 (Capstone III) with C or better |
| BME | 405 | Biomedical Engineering Product Design & Development: Capstone V | Introduces prototyping of the capstone device and begins experiments of the device prototype. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 404 (with C or better if completed) |
| BME | 406 | Biomedical Engineering Product Design & Development: Capstone VI | Addresses prototype device verification and validation methods to achieve a robust design; the conclusion of the capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 404 and 405 (with C or better if completed) |
| BME | 413 | Biomedical Instrumentation | Principles of medical instrumentation. Studies of medical diagnostic instruments and techniques for the measurement of physiologic variables in living systems. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | L | Pre-requisites: Biomedical Engineering major; BIO 201 and 202 (OR BME 201 and 202 and 203 or BME 235) with C or better; BME 350 with C or better |
| BME | 416 | Biomechanics | Mechanical properties of bone, muscle, and soft tissue. Static and dynamic analysis of human movement tasks such as locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Bioengineering or Pre-Med Engineering BSE student; BME 318 and MAE 212 with C or better |
| BME | 417 | Biomedical Engineering Capstone Design I | Technical, regulatory, economic, legal, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | L | Pre-requisite: BME 300, 318, 331 and 370 with C or better; IEE 380 (or BME 322) with C or better |
| BME | 419 | Biocontrol Systems | Applies linear and nonlinear control systems techniques to analysis of neuromusculoskeletal, cardiovascular, thermal, and mass transfer systems of the body. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 350 and BME 370 with C or better |
| BME | 421 | Biomedical Instrumentation I | Introduces principles of biomedical instrumentation and techniques of physiologic measurement as used in medicine and biology. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 341 and 353 with C or better |
| BME | 422 | Biomedical Instrumentation II | Principles of biomedical instrumentation and techniques as used in medicine and biology with an emphasis on medical diagnostic imaging. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): BME 421 with C or better if completed |
| BME | 423 | Biomedical Instrumentation Laboratory | Lab experience with problems, concepts, and techniques of biomedical instrumentation in static and dynamic environments. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | L | Pre-requisite: Biomedical Engineering student; Co-requisite: BME 413 |
| BME | 434 | Applications of Bioengineering Transport Phenomena | Develops mathematical models of transport phenomena in physiological systems, medical devices, and pharmacokinetic analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 331 with C or better |
| BME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BME | 490 | Biomedical Engineering Capstone Design II | Individual projects in medical systems or medical device design and development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 417 with C or better |
| BME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| BME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-7 | | Pre-requisite: Bioengineering or Pre-Med Engineering BS or BSE student |
| BME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 520 | Bioelectric Phenomena | Study of the origin, propagation, and interactions of bioelectricity in living things; volume conductor problem, mathematical analysis of bioelectric interactions, and uses in medical diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 521 | Neuromuscular Control Systems | Overview of sensorimotor brain structures. Application of nonlinear, adaptive, optimal, and supervisory control theory to eye-head-hand coordination and locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BME | 522 | Biosensor Design and Application | Theory and principles of biosensor design and application in medicine and biology. Principles of measurements with biosensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 524 | Fundamentals of Applied Neural Control | Fundamental concepts of electrical stimulation and recording in the nervous system with the goal of functional control restoration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 525 | Surgical Techniques | Principles of surgical techniques, standard operative procedures, federal regulations, guidelines, and state-of-the-art methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Graduate Engineering students only |
| BME | 526 | Introduction to Neural Engineering | Introduces the field of neural engineering. Neural engineering, as with all engineering fields, can be thought of as applied scientific understanding, in this case, applied neuroscience. Covers aspects of neurophysiology, neuroanatomy, neurosurgery, biophysics, electronics and signal processing; integrates these knowledge areas into neural engineering applications. Covers an entire process for conducting research in neural engineering: surgical implantation of electrodes, data acquisition, processing neural signals, decoding neural data, and controlling prosthetic devices. Provides foundation for working with neural engineering applications and conducting research in neural engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BME 526 or BME 598 (Intro to Neural Engineering) |
| BME | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| BME | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| BME | 561 | Clinical Neuroscience | Fundamental mechanisms that underlie diseases and disorders of the central and peripheral nervous systems. Introduces assessment and pharmacological, surgical and rehabilitative management of nervous systems disorders. Prior knowledge of neural systems is helpful. Identifies the mechanisms by which key disease and trauma states impact neural systems and how clinicians identify the locus and type of damage based on clinical and imaging criteria. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 566 | Medical Imaging Instrumentation | Design and analysis of imaging systems and nuclear devices for medical diagnosis, therapy and research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Pre-requisites: Graduate Bioengineering students only |

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| BME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 101 | Introduction to Bioinformatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Introduces topics in translational bioinformatics, such as sequence alignment, the Human Genome Project, gene expression analysis, genome-wide association studies, next-generation sequencing. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 102 | Introduction to Public Health/Imaging Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Second course in a three-semester series focusing on biomedical informatics applications in public health, including population studies and outbreak detection, and medical imaging, including telemedicine. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: BMI 101 with B or better |
| BMI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 201 | Introduction to Clinical Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Provides an introduction to biomedical informatics techniques and applications used in clinical environments. Includes searching and organizing free text information, decision analysis techniques and clinical decision support systems, and clinical applications including physician order entry used in electronic medical records. Also covers challenges in clinical informatics, including sociotechnical and cognitive issues in implementation and use. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 211 | Modeling Biomedical Decisions | First semester of a three-semester course sequence surveying the methods and theories underlying the field of biomedical informatics. Explores models of medical decision making, including classical decision theory, Bayesian, and cognitive models. Also includes a component discussing evaluation methods in biomedical informatics. | N | PRA | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 221 | Knowledge Representation for Biomedical Informatics | Introduces topics in knowledge representation and modeling, including frame-based systems, logic-based systems, rule-based systems, inference, and reasoning. Overview of history and present state of the field. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 301 | Clinical Environments | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and exposes students to the clinical environments in which health care providers create, manage, and use clinical information. Students attend lectures and spend a significant portion of time examining and reporting on different clinical settings throughout the semester. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 311 | Modeling Biomedical Knowledge | Introduces concepts of artificial intelligence and knowledge modeling using medical informatics examples. Historical foundations and motivations of AI in medical applications; problem solving, reasoning, knowledge management, and planning as applied to medical informatics problems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |

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| BMI | 312 | Modeling Biomedical Data | Third semester of a three-semester course surveying the methods and theories underlying the field of biomedical informatics. Explores methods of use in the design and maintenance of biomedical databases, machine learning techniques, information retrieval in biomedicine and other methods specific to bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 330 | Topics in Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medicine research. Topics include bioinformatics data acquisition and management, including microarrays, database modeling and integration, analysis methodologies, including statistics and data mining, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 332 | Team Dynamics for Healthcare IT Projects | Teaches the fundamentals of leadership, management, and team dynamics in a project-focused software engineering environment, and with a focus on informatics and healthcare applications. Teaches students about team and group dynamics, recognizing dysfunctional teams, and helping to fostering productive group and leadership skills. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 461 | Advanced Topics in Biomedical Informatics I | Covers current trends and cutting-edge research areas of clinical, public health, and consumer health informatics. Particular emphasis on research that is of relevance to patients, and the healthy public, covering such topics as outbreak detection and the personal health record. Also covers research on the use of technology in medical education, and the ways in which clinical decision support systems are applied in contemporary medical practice. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 462 | Advanced Topics In Biomedical Informatics II | Covers current trends and cutting-edge research areas of bioinformatics, imaging informatics, and translational science. Emphasizes informatics approaches to the novel data sources that are supplied by the next generation of methods for affordable gene sequencing, and initiatives underway to accelerate the integration of novel research findings into everyday clinical practice. Includes a series on modeling and simulation, current approaches to computer-aided diagnosis of medical images, ways in which technology can support the discovery of new knowledge, and the application of telemedicine to remotely facilitate clinical care. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 465 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Credit is allowed for only BMI 465 or BIO 455 |
| BMI | 466 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better; Credit is allowed for only BMI 466 or BIO 456 |
| BMI | 482 | Capstone I | First course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of a research project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | |
| BMI | 483 | Capstone II | Second course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of an applied project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | Pre-requisite: BMI 482 with C or better |
| BMI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | |
| BMI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | | |
| BMI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | L | |
| BMI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-7 | | |
| BMI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-3 | | |
| BMI | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMI | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |

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| BMI | 504 | Introduction to Clinical Environments | Course is divided into three sections. The first section covers medical and health care concepts and terms, and discuss observational techniques. In the second portion, students investigate a variety of different clinical environments and report back to the class on their findings. The final portion summarizes the key points of information technology in these clinical environments. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 505 | Foundations of Biomedical Informatics Methods II | Second semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI 502 with C or better; BMI Graduate student |
| BMI | 506 | Clinical Decision Support | The course will provide an in-depth analysis of computer-based approaches to supporting clinical decision making for providers and patients (as well as healthy individuals, for disease prevention/health maintenance). The history of the field of clinical decision support (CDS) and the spectrum of methodologies will be reviewed. Practical issues involved in successful implementations of CDS will be discussed. The roles of standards and infrastructure will be examined. Current research topics and foci will be explored. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BMI major. Credit is allowed for only BMD 507 or BMI 507 or BMI 591 (Intro to Dglt Img Processing) |
| BMI | 515 | Applied Biostatistics in Medicine and Informatics | Comprehensive treatment of the statistical methods used most often to analyze quantitative data collected in medical and biomedical informatics studies, including clinical trials, epidemiologic studies, studies of the accuracy and performance of screening and diagnostic tests, and studies to develop predictive models. Students learn to use SAS statistical software to analyze biomedical data. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 516 | Advanced Biomedical Data Analysis | Acquisition, conversion and organization of biological data into relevant diagnostic, therapeutic, and research information using information extraction and data mining. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 501 with C or better |
| BMI | 520 | Modeling Gene Regulatory Networks | Computational and mathematical modeling used to approximate gene regulatory networks as well as signaling pathways and inference of model parameters. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 505 and BMI 516 with C or better |
| BMI | 540 | Problem Solving in Biomedical Informatics | Theory and practice of software engineering principles as they apply to large- and medium-scale clinical systems from bench to bedside. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BMI Graduate student; BMI 501 with C or better |
| BMI | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): BMI Graduate student; Credit is allowed for only BMD 550 or BMI 550 |
| BMI | 555 | Statistical Learning for Data Mining | Surveys data analysis methods for massive data sets and provides experience in analysis with computer software. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 515 or IEE 572 or IEE 578; Credit is allowed for only BMI 555 or IEE 520 |
| BMI | 560 | Teaching in Biomedical Informatics | Student serves as a teaching assistant with a faculty member who is teaching either a required or elective course in the Biomedical Informatics curriculum. Such courses will generally be BMI courses but with the approval of the student's faculty program advisor may include a course that is an approved elective in the BMI program but is offered in another department within the university. The experience provides a significant teaching role, either lecturing or moderating small group sessions or laboratories. Grading class homework assignments and designing/grading examinations will also typically be part of the experience. Assisting other students outside of class and being available during office hours will also generally be part of the student teacher's role. A student may also receive 1 hour of credit for participating substantively in the design of a new course, working closely with a faculty member. Generally in such circumstances the student should then serve as course teaching assistant when it is offered for the first time (separate enrollment in this course). | N | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Biomedical Informatics PhD student |
| BMI | 570 | BMI Symposium | Students attend the BMI Symposium Speaker Series twice a month and the student journal club discussion on alternate weeks. During the journal club weeks, each student leads a discussion on a current topic pertinent to the field of biomedical informatics. | N | SEM | Y | YGB | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: BMI Graduate student |
| BMI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: BMI Graduate student |

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| BMI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Biomedical Informatics Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 601 | Fundamentals of Health Informatics | Offers an overview of the field of health informatics. Combines perspectives from medicine and computer science for use of computers and information in health care and the health sciences. Includes an overview of health information literacy and data standards. Covers specific applications and general methodology in health informatics using current topics in the field. Discusses evaluations of health systems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 602 | Programming in a Healthcare Domain | Intensive introduction to object-oriented programming concepts focused on the unique challenges such as those related to data volume, complexity, and uncertainty inherent to applications in a healthcare domain. Also covers the fundamentals of algorithm analysis and data structure design. Stresses a software engineering approach to abstraction for problem decomposition and solution formulation, with object-oriented and reusability concepts introduced early. Emphasizes the use of generic data structures and abstractions from template libraries for reusability, as well as modular design. In addition, also covers basic concepts of algorithms and data structures. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 603 | Health Informatics Database Modeling and Applications | Thorough coverage of the foundations of database systems and their specific use and modeling in healthcare and biomedical environments. Students learn through hands-on experience with the modeling and implementation of health-related databases using the relational approach. Topics include an overview of database models and architecture, database design, SQL, XML, and data warehousing as they are applied in clinical domains. Students are encouraged to explore database-related topics of their own, choosing ones that are relevant to a bioinformatics or clinical domain. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 604 | Health Information Literacy | Students learn to locate, retrieve, and store information with an emphasis on electronic search, retrieval, and storage. They also learn to assess the validity and quality of information, improve the quality of information, and how to improve the quality of, protect, and effectively communicate health information. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 605 | Health Information Systems and Applications | Explores the use of information systems in different healthcare settings, analyzing operational and strategic objectives for their deployment. Emphasizes the analysis of the different factors that influence decision making during the process of design and deployment of systems, including human factors, hardware, software, policy, communications, and the successful management of such systems. Also covers guidelines for the design and successful deployment of systems to meet those objectives and includes discussion of architectures, components, and models. Analyzes specific case studies of successfully and unsuccessfully deployed systems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |

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| BMI | 606 | Health Data Standards | The cost-effective delivery of high quality, safe healthcare requires access to multiple data sources and systems and applications responsible for data acquisition and management, the ability to aggregate, integrate, and analyze data from multiple sources, and the ability to communicate the results of such analyses or the knowledge resulting from those analyses to users in a timely fashion at points where they are needed. A variety of standards are required, at the data and communication level. Reviews the state of these standards, and the multiple entities that have a stake in them, and enables the student to navigate this complex process in selecting, implementing, or extending health systems in a variety of settings. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Health Informatics MAS student |
| BMI | 607 | Effective Professional Communications | To be able to work in the field of biomedical informatics or health information technology requires an understanding of not only science and technology but also biomedicine and healthcare. This requires both familiarity with the basic concepts of these fields, as covered in other courses, as well as the ability to present ideas clearly in both written and oral communication. Also requires the ability to work effectively in groups, with shared understanding of group and individual roles, assignments, and responsibilities. Provides experience with oral, written, and group communication tasks, and uses critique and feedback as a method for highlighting issues and areas for improvement. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 608 | Project Management for Interdisciplinary Teams | Introduces students to the healthcare team and explores tools and techniques for establishing effective interdisciplinary teams in a healthcare setting, emphasizing collaborative clinical decision-making and patient management. By working in small teams, the course puts into practice these techniques, allowing students to collaborate with other health professionals to solve specific problems, provide services, or develop new understandings. Also covers the concepts, skills, tools, and techniques involved in the management of information system projects, providing an introduction to the established discipline of project management, with a specific focus on how they apply to managing information systems for a biomedical setting. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 609 | Capstone | This course assists students in preparing their capstone project, which represents the culmination of their study for the MAS in Health Informatics focusing on development process, technical skills, and communication. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 610 | Clinical Culture and the Healthcare Environment | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and reviews clinical environments in which healthcare providers create, manage, and use clinical information. Students perform observations in a variety of clinical environments. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 611 | Applied Data Analysis | Students learn what statistical methods are used most widely in the analysis of data from studies of disease risk factors, health interventions, and healthcare improvements, and what statistical methods should be used to analyze data from various types of studies. They learn how to estimate the number of subjects needed for studies of various designs. They learn to conduct and interpret multiple linear, multiple logistic, and multivariate lifetable analysis. Hands-on experience in the use of statistical software to conduct analysis of health data. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 612 | Applied Data Mining in Biomedicine | Comprehensive introduction to data mining methods and algorithms used most often to analyze data collected in biomedical informatics studies, including genomics and proteomic disease association studies, clinical trials, clinical image analysis and studies of the accuracy and performance of screening and diagnostic tests. Emphasizes assessing data quality, understanding how to select an overall approach to analysis, and presenting and interpreting the results of data mining analysis. Uses Excel to effectively display data collected in biomedical research studies and Weka to analyze data using approaches that are used commonly in biomedical studies. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 613 | Workflow Analysis and Redesign in Health Systems | Provides an overview of workflow analysis and process redesign and their use in quality improvement activities, including specification. Uses case examples to highlight key concepts and covers measurement concepts and techniques. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |

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| BMI | 614 | Health Systems Engineering | Focuses on the links of systems engineering to fundamentals of decision theory, statistics, and optimization, and includes discussion of current successful techniques for systems engineering. System Engineering seeks to enable the successful design, implementation, deployment, and maintenance of successful systems. Emphasizes gathering and analysis of customer needs for the specification and documentation of required functionality early in the system's lifecycle. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 615 | Human Factors Engineering for Biomedical Applications | Fundamental principles of human-computer interaction and human factors and how to apply them to real world problems through class projects, homework, and real-world design. Focuses on learning why user-friendly interfaces can greatly improve work productivity and enhance the quality of healthcare without radically changing the underlying technology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 616 | Clinical Decision Support | Focuses on the major problems of human decision making in healthcare, including causes of errors, decreased quality, and increased costs. Also explores the role of information technology, primarily through computer-based clinical decision support (CDS), to address these problems. Explores key methods used to provide CDS, the capabilities and limitations of current approaches, and the challenges for managing and updating the knowledge needed to deliver CDS in an enterprise setting. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 617 | Principles of Evidence-based Medicine | The origins of evidence-based decision making and policy formulation; how to use the tools and approaches that have been developed to support evidence-based decision making and policy formulation. The history and evolution of systematic review and meta-analysis as a tool to inform decisions and policies based on evidence. Hands-on experience by conducting a systematic review and a meta-analysis and using the results to draw conclusions and formulate policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 618 | Leadership and Change in Clinical Environments | Covers core concepts related to leadership and specific methodologies used by effective leaders, including running meetings, negotiation, and conflict management. Also reviews change management as a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. Provides exposure to various models and processes related to change management and the tradeoffs between these different approaches. Includes case examples related to health information. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMJ | 501 | Essentials of Biomimicry | Offered as a sampler of the various topics (discipline, emulate, ethos, (re)connect and iSites, human-nature connection, biomimicry thinking, and life's principles) within the discipline of biomimicry. Each week is devoted to a specific topic and is led by a different instructor. Provided a basic overview of each aspect of the discipline with ample opportunity for conversation and dialogue around the specific components, with an understanding that greater depth into each topic can be learned by taking the advanced BMJ courses. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 502 | Life's Principles | Life's principles are nature's universal design guidelines based on 3.8 billion years of successful strategies across all life. With instruction by Dr. Dayna Baumeister, this 16-week online course takes participants on a deep dive of life's principles, including the review and study of life's operating conditions, the six primary principles and their related sub-principles. Gives participants the experience necessary to bring these design guidelines into practice. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMY | 503 | Biology Taught Functionally | Biomimicry teaches biology through the lens of function, thereby providing a core understanding in biology for all students, no matter their background. Explores how biologists gather and research information and how that knowledge can inform other disciplines. Also introduces the art of translating biological concepts into strategies for application, which is then carried throughout all the courses. Students learn how to work with biologists on a biomimicry team and how to weave biology and biomimicry together. The biologists in the cohort not only learn to look at nature through the function lens, but also act as subject matter experts for their interdisciplinary teams and teaching assistants. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 504 | Biomimicry Thinking | Biomimicry thinking is the practice of biomimicry from a methodology-based approach. 16-week intensive in the methodology of biomimicry reviews how biology and biomimicry can be incorporated into the four major phases of any design process: scoping, discovering, creating and evaluating. Covers the art of translating biological concepts into strategies for application and building a taxonomy of design principles. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 511 | Biomimicry and Design | Biomimicry is innovation inspired by nature, or the conscious emulation of nature's genius. Prepares participants to design sustainable innovations using the biomimicry philosophy and methodology. Participants complete a 16-week series of lectures and assignments to demystify the design thinking process, understand how to harness the potential of approaching challenges with a design mind, distill a design challenge, understand user needs, build a bridge between biology and design, use a methodology for discovering models from nature, abstract design principles from bio-inspired strategies, and translate those principles into sustainable innovations. Participants both with a design background and without equally experience a deep immersion into the world of biomimetic design. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 512 | Biomimicry and Engineering | Prepares participants to understand the field of engineering; identify the types of engineers and what each one does; what constrains engineers' work under, materials selected by engineers, how to present biological ideas to engineers and how to integrate ideas from their discipline into sustainable engineering designs using biomimicry principles. Most examples used are of large engineered structures. These structures play critical functions in human systems, have a significant impact on the environment and last for over a 100 years, so it is important to imbed as much sustainability into their design as possible. Requires a final team project designed to put these ideas into practice. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 516 | Biomimicry and Business | Addresses business topics from the biomimicry point of view; explains mechanisms and tools for comparing and contrasting business and nature. Challenges participants to question conventional ways of conducting business and come up with new approaches based on a different point of view. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 517 | Human-Nature Connection | Grounds the emerging discipline of biomimicry as a continuation of our ancestral connection with nature. Human-Nature Connection (HNC) engages participants in an exploration of the meaning and value of connecting with nature. Topics include defining humans, nature, and our connection with nature; establishing the evolutionary, personal, and socio-cultural influences on the different expressions of this connection; and illustrating the relevance of biomimicry to the human-nature connection. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 530 | Virtual Design Lab Practicum | Practicum designed to allow participants to dive deep into the biomimicry tools and resources presented during the program and to apply them selectively to a specific and unique opportunity of the student's choosing. Projects should have a meaningful outcome achievable within the semester, and should engage the scoping, discovering, creating and evaluating phases of biomimicry thinking. Deliverables are milestone based, and the final deliverable should have application in a real-world setting. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMJ | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMJ | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 330 | Organizational Leadership | Strategies, skills, and techniques that promote successful leadership within organizations. Practice leadership skills and self-discovery in preparation for leadership positions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| BUA | 380 | Small Business Leadership | Develops leadership skills needed to form, lead, and operate a small business. Emphasizes creating a vision, research, and problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 381 | Small Business Accounting and Finance | Accounting and finance skills needed by small business owners to acquire, allocate, and track monetary resources and evaluate performance. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. Must not have earned credit in ACC 382. |
| BUA | 383 | Small Business Working Relationships | Addresses communication and the people in a business—clients, employees, suppliers, competitors, governments, family, and self development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 384 | Small Business Operations and Planning | Planning and executing plans—the what, when, where, how, and who from product/service/project idea to pay back or completion. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 440 | Strategic Management | Strategic formulation and administration of the total organization, including integrative analysis and strategic plan; interrelationship of business functional areas. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better. Credit is allowed for only AGB 414, BUA 440 or 441. |
| BUA | 441 | Entrepreneurship and Feasibility | Assessment of the opportunities, risks, and challenges associated with business start-up and continued operation. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better. Credit is allowed for only AGB 414, BUA 440 or 441. |
| BUA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BUA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | | |
| BUA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BUE | 480 | Teaching Business Subjects | Organization and presentation of appropriate content for business subjects in the secondary school. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 481 | Technology in Business and Vocational Education | Emerging curricula and instructional technology in business and vocational education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| BUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 502 | Organization and Management of Cooperative Programs | Work-study programs for business occupations in high schools and community colleges. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| BUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| BUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| BUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| CBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 232 | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| CDE | 450 | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better; Minimum Junior standing |
| CDE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman Standing; Maximum 25 hours |
| CDE | 232 | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| CDE | 337 | Early Childhood Intervention | Explores how child development theory affects practice with children and families, emphasizing development of young children and early intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| CDE | 338 | Child Development Practicum | Supervised practicum in the Child Development Lab preparing students for work in child care centers and agencies serving young children and families. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 2-4 | | |
| CDE | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| CDE | 356 | Race and Child Development | Reviews the current research and literature about the particular role of race in child development. Even though race is not a valid biological construct, it has significant social implications as it shapes how children interact and are treated by others. Through primarily class discussions/activities, presentations and papers, addresses: (1) What are the research and theoretical issues in studying race? (2) What does race and racism mean? (3) How does race influence developmental processes? | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): APA 200 or APA 210 or 30 hours. Credit is allowed for only APA 356 or CDE 356 or APA 394 (Race and Child Development) |
| CDE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better; Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDE | 430 | Infant/Toddler Development in the Family | Examines the development of infants/toddlers, the socialization processes of families, and the interactions of these processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 450 | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better; Minimum Junior standing |
| CDE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| CDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| CDE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | L | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| CDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| CDE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| CDE | 531 | Theoretical Issues in Child Development | Major developmental theories, related research, and their application to family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 533 | Research Issues in Child Development | In-depth exploration and critique of research focusing on child development in a family setting. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 534 | Risk and Resilience in Children and Adolescents | Integrates child development, family theory, and research to understand risk and resilience in children and adolescents. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 531; FAS 500 |
| CDE | 570 | Child Development for Infant Family Practice | Examines development during infancy and early childhood with an emphasis on social and emotional development, mental health, and early parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 571 | Infant Mental Health for Infant Family Practice | Surveys the biological and environmental risk factors that jeopardize the mental health of infants and young children; overview of prevention and intervention strategies. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 572 | Assessment of Infants, Toddlers, and Families for Infant Family Practice | Developmentally appropriate assessment of mental disorders and developmental disabilities in infants, toddlers, and preschool children and parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 573 | Cultural Competence for Infant Family Practice | Examines cultural issues impacting parent-child relationships and child rearing and the effectiveness of infant mental health and early intervention services on families of various ethnic and cultural backgrounds. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 574 | Observation and Reflection for Infant-Family Practice | Strategies for observing infant behavior and parent-child relationships and skills for reflective, relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 575 | Advanced Observation and Reflection for Infant-Family Practice | Advanced strategies for observing infant behavior and parent-child relationships and skills for reflective relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 576 | Applied Research Methods for Infant Family Practice | Survey and critical examination of child development, parent-child relationships, family relationships, and early intervention research and the application to IFP. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 610 | Gender Development | Examines current theories and research concerning the various aspects of gender and developmental change. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 612 | Children's Peer Relationships | Studies scientific theory, research, and evidence on peer relationships and social competence from early childhood through adolescence. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: CDE 531 with C or better |
| CDE | 634 | Prevention and Child Development | Advanced training in research and theory-based approaches to developing and evaluating prevention programs for children at risk. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite: CDE 534 |
| CDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better; Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 250 | Career Development | Covers models of the individual, the world of work, and decision making with emphasis on individual application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | |
| CED | 294 | Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| CED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |

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| CED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 501 | Intro to Research and Evaluation in Counseling | Introduction to the basic models of research and evaluation in the field of counseling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking).; Credit is allowed for only CED 501 or 591 (Res. & Eval. in Counseling) |
| CED | 502 | Counseling Research Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate counseling research problems using statistical software. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CED 502 or CED 591 (Counseling Research Data Analysis) |
| CED | 522 | Theories of Counseling and Psychotherapy | Presents major theories of psychological intervention as well as underlying personality theory upon which they are based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 523 | Psychological Tests | Standardized tests in the study of the individual, with emphasis on test score interpretation in counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 525 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COE 501 |
| CED | 527 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 528 | School Counseling | Introduces counseling within multicultural settings. Emphasizes counseling, consultation, and coordination skills needed for schools' comprehensive developmental guidance programs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 534 | Occupations and Careers | The world of work, career development, education, and training for occupational entry and mobility. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 545 | Analysis of the Individual | Theory and methods commonly used in studying the individual. Observational methods, diagnostic interviews, structured, and semi-structured methods for assessing personality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 567 | Group Dynamics and Counseling | Group process factors, theory, and diversity issues determining effective interaction in small groups. Emphasis placed on lecturettes, self awareness, and experiential components. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 577 | Counseling Prepracticum | Focus on racial, social, and cultural factors in the development of helping relationships through integration of cognitive and affective self-awareness with counseling skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling Psychology MC or PhD student |
| CED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

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| CED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 672 | Marriage and Family Counseling | Introduces marriage and family counseling theories. Emphasizes a systems-communication model utilizing cocounseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 685 | School Counseling Internship | Structured practical experience in school counseling following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Masters of Counseling major |
| CED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CEE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | HU | Credit is allowed for only CEE 181, FSE 181, or SOS 181 |
| CEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |

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| CEE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CEE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |
| CEE | 281 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 300 | Engineering Business Practice | Engineering economic principles, cost/benefit analysis, project financing and delivery, management of engineering design, business practices, ethical and professional responsibilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | L | Pre-requisites: Engineering BSE student; Junior or Senior standing; MAT 267 with C or better |
| CEE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | BSE Civil Engineering or BSE Construction Engineering major; CEE or CNE 212; CEE or CNE 213 with C or better. Pre- or corequisite(s): CEE or MAE 384 with C or better if completed OR BS Construction Mgt major. Credit is allowed for only CEE 321 or CNE 321 |
| CEE | 341 | Fluid Mechanics for Civil Engineers | Fundamental principles and methods of fluid mechanics forming the analytical basis for water resources engineering. Conduit and open channel flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: BSE Civil Engineering student; CEE 212 (or CEE 211 or MAE 212) and CEE 213 with C or better; Pre/Co-requisite: CEE 384 or MAE 384 (with C or better if completed) |
| CEE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 351 |
| CEE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 353 |
| CEE | 361 | Introduction to Environmental Engineering | Concepts of air and water pollution; environmental regulation, risk assessment, chemistry, water quality modeling, water and wastewater treatment systems designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 213 with C or better; CHM 114 or CHM 116; Pre- or corequisite(s): IEE 380 |
| CEE | 372 | Transportation Engineering | Fundamental background of highway and traffic engineering in the areas of planning, design, and operations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: Civil Engineering BSE student; CEE 213 with C or better; Pre/Co-requisite: IEE 380 |
| CEE | 384 | Numerical Methods for Engineers | Numerical methods and computational tools for selected problems in engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | CS | Prerequisite(s): Fulton Engineering undergrad; MAT 274 or 275 with C or better; MAT 242 or 343 (or 342 for non-MAE student) with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if complete; Credit allowed for only MAE 384 or CEE 384 |
| CEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 400 | Earth Systems Engineering and Management | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CEE | 412 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and 353 with C or better; Credit is allowed for only CEE 412 or 511 |
| CEE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better; Credit is allowed for only CEE 420 or CNE 420 |
| CEE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better; Credit is allowed for only CEE or CNE 421 |
| CEE | 423 | Structural Design | Analysis and design of reinforced concrete steel, masonry, and timber structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 421 with C or better; Pre/Co-requisite: CEE 420 (with C or better if completed) |
| CEE | 432 | Developing Software for Engineering Applications | Matrix and computer applications to structural engineering and structural mechanics. Stiffness and flexibility methods, finite elements, and differences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; Credit is allowed for only CEE 432 or 532 |
| CEE | 440 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models, and systems. Rain-runoff models. Hydrologic design. Concepts, properties, and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 341 or MAE 340 with C or better; Credit is allowed for only CEE 440 or CEE 545 or CEE 598 (Hydrology) |
| CEE | 441 | Water Resources Engineering | Applies the principles of hydraulics and hydrology to the engineering of water resources projects; design and operation of water resources systems; water quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 with C or better |
| CEE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better; Credit is allowed for only CEE 452 or CNE 452 |
| CEE | 462 | Unit Operations in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 with C or better |
| CEE | 466 | Urban Water System Design | Capacity; planning and design of water supply; domestic and storm drainage; and solid waste systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 and 361 with C or better |
| CEE | 467 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 or MIC 220 with C or better; Credit is allowed for only CEE 467 or 567 |

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| CEE | 470 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 361; Credit is allowed for only CEE 470, 484 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 474 | Transportation Systems Planning | Transportation systems modeling procedures, travel characteristics analysis, traffic predictions, transportation systems management, and transit planning methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 and 384 with C or better |
| CEE | 475 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 with C or better; Credit is allowed for only CEE 475 or 576 |
| CEE | 481 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; CEE 351 with C or better; CEE 372 with C or better. Credit is allowed for only CEE 481 or 585 |
| CEE | 483 | Highway Materials, Construction, and Quality | Properties of highway materials, including aggregates, asphalt concrete, and portland cement concrete; construction practice; material delivery, placement, and compaction; quality control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and CEE 372 and CEE 353 with C or better. Credit is allowed for only CEE 483 or 583 |
| CEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | |
| CEE | 485 | Sustainable Civil and Environmental Systems Engineering | Provides working knowledge of operations research methodologies, both the traditional and more modern metaheuristic techniques, to evaluate sustainable civil engineering systems and quantitatively evaluate project alternatives involving single or multiple goals. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 300; MAT 242 with C or better |
| CEE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | L | Pre-requisites: Civil Engineering BSE student; CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student: CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486 |
| CEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | L | Pre-requisite: Barrett Honors Engineering student |
| CEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-7 | | |
| CEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 506 | Life Cycle Assessment for Civil Systems | Covers fundamental and advanced concepts of the life cycle assessment framework exploring products, services, activities and infrastructure systems. Examines key concepts for system boundary selection, functional unit selection, inventorying, impact assessment and interpretation stages with a focus on energy and environmental assessment. Advanced concepts include allocation of effects, problem formulation for assessing footprints versus decisions or policies, and assessment of infrastructure interdependencies and supply chains. Exposes tools and data sources and presents approaches for evaluation of sensitivity and uncertainty of results. Encourages students with broad sustainability interests to enroll and explore how life cycle assessment can aid their work by shifting their views from direct to cradle-to-grave effects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CEE 506 or CEE 598 (Lifecycle Assessment) or SOS 546 or SOS 598 (Lifecycle Assessment) |
| CEE | 507 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |

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| CEE | 511 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate Civil Engineering student; Credit is allowed for only CEE 412 or 511 |
| CEE | 512 | Pavement Performance and Management | Pavement management systems, including data collection, evaluation, optimization, economic analysis, and computer applications for highway and airport design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |
| CEE | 513 | Pavement Evaluation, Maintenance, and Rehabilitation | Provides the necessary information for pavement engineers to evaluate, identify, and select reliable and cost-effective rehabilitation alternatives for existing Hot Mix Asphalt (HMA) and Portland Cement Concrete (PCC) pavements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 514 | Bituminous Materials and Mixture | Types of bituminous materials used in pavement mixtures. Chemical composition, physical properties, desirable aggregate characteristics, optimum asphalt contents, superpave asphalt binder, mixture design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |
| CEE | 515 | Properties of Concrete | Materials science of concrete. Cement chemistry, mechanisms of hydration, interrelationships among micro- and macro-properties of cement-based materials. Mechanical properties, failure theories, fracture mechanics of concrete materials. Cement-based composite materials and the durability aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 516 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 521 | Stress Analysis | Introduces tensors: kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 522 | Experimental Stress Analysis | Specification and analysis of stress and strain at a point, stress-strain relationships. Mechanical, optical, and electrical strain gages and circuits, digital data acquisition and analysis, closed loop mechanical testing, fracture mechanics, optical methods and photoelasticity, and introduction to nondestructive testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 526 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 527 | Advanced Concrete Structures | Ultimate strength design. Combined shear and torsion. Serviceability. Plastic analysis. Special systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 530 | Prestressed Concrete | Materials and methods of prestressing. Analysis and design for flexure, shear, and torsion. Prestress losses due to friction, creep, shrinkage, and anchorage set. Statically indeterminate structures. Design of flat slabs, bridges, and composite beams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 532 | Developing Software for Engineering Applications | Fundamentals of engineering software development and object-oriented programming. Programming in C++. Development of matrix toolbox. Introduces finite element method. Computer graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 432 or 532 |
| CEE | 533 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 536 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems. exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| CEE | 540 | Groundwater Hydrology | Physical properties of aquifers, well pumping, subsurface flow modeling, unsaturated flow, numerical methods, land subsidence, and groundwater pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 541 | Surface Water Hydrology | Hydrologic cycle and mechanisms, including precipitation, evaporation, and transpiration; hydrograph analysis; flood routing; statistical methods in hydrology and hydrologic design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 543 | Water Resources Systems | Theory and application of quantitative planning methodologies for the design and operation of water resources systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 545 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models and systems. Rain-runoff models. Hydrologic design. Concepts, properties and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 440, 545 or 598 (Hydrology) |
| CEE | 550 | Soil Behavior | Physicochemical aspects of soil behavior, stabilization of soils, and engineering properties of soils. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 551 | Advanced Geotechnical Testing | Odometer, triaxial (static and cyclic) back pressure saturated and unsaturated samples, pore pressure measurements, closed-loop computer-controlled testing, in-situ testing, and sampling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 553 | Advanced Soil Mechanics | Applies theories of elasticity and plasticity to soils, theories of consolidation, failure theories, and response to static and dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 554 | Shear Strength and Slope Stability | Shear strength of saturated and unsaturated soils strength-deformation relationships, time-dependent strength parameters, effects of sampling, and advanced slope stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CEE | 555 | Advanced Foundations | Deep foundations, braced excavations, anchored bulkheads, reinforced earth, and underpinning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 557 | Geoenvironmental Engineering | Environmental site assessment, solid waste management, waste containment system design, soil and groundwater remediation, soil erosion control, brownfields development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 558 | Unsaturated Soil Mechanics | Advanced unsaturated soil mechanics theory, including introduction of stress-state variables and constitutive relationships for unsaturated flow and stress-strain applications. Knowledge of CEE 351 or equivalent material is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 559 | Earthquake Engineering | Characteristics of earthquake motions, selection of design earthquakes, site response analyses, seismic slope stability, and liquefaction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 560 | Soil and Groundwater Remediation | Presents techniques for remediation of contaminated soils and groundwaters with basic engineering principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 561 | Physical-Chemical Treatment of Water and Waste | Theory and design of physical and chemical processes for the treatment of water and wastewaters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 562 | Environmental Biochemistry and Waste Treatment | Theory and design of biological waste treatment systems. Pollution and environmental assimilation of wastes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 563 | Environmental Engineering Chemistry | Analyzes water, domestic and industrial wastes, lab procedures for pollution evaluation, and the control of water and waste treatment processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 564 | Contaminant Fate and Transport | Fate and transport processes with emphasis on governing equations and parameters relevant to the migration of chemicals in the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 565 | Advanced Environmental Biotechnology | Emerging topics in environmental biotechnology and related problem-solving techniques. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); CEE 562 and 567; Credit is allowed for only CEE 565 or 598 (Advanced Environmental Biotechnology) |
| CEE | 567 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 467 or 567 |
| CEE | 568 | Unit Processing in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): graduate Engineering major; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CEE | 570 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 470, 494 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 571 | Advanced Environmental Chemistry | Applied water quality and water treatment aquatic chemistry. Knowledge of environmental chemistry topics is necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD major |
| CEE | 573 | Transportation Operations | Driver, vehicle, and roadway characteristics; traffic control devices; traffic engineering studies; and transportation system management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 576 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 475 or 576 |
| CEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 581 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 581 or SOS 552 |
| CEE | 582 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 483 or 583 |
| CEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 585 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MS, MSE or PhD Civil, Environmental and Sustainable Engineering major. Credit is allowed for only CEE 481 or CEE 585 |
| CEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |

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| CEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | IND | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Prerequisite(s): Civil Engineering PhD student |
| CEN | 501 | Computer Systems I | Introduces digital CMOS circuit and logic design and signal processing and analysis. Design of digital CMOS logic gates, combinational and sequential logic circuits, arithmetic logic unit, register-transfer-level design; Fourier and z transforms, filters, sampling, random variables, distribution and density functions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Engineering Graduate student; Credit is allowed for only CEN 501 or 591 (Computer Systems I) |
| CEN | 502 | Computer Systems II | Covers fundamentals of computer architecture and focuses on basic principles of systems programming, operating systems, compilers and networking topics that cover the computer science to computer engineering interface. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering Graduate student; Credit is allowed for only CEN 502 or 591 (Computer Systems II) |
| CEN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CEN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHE | 100 | Introduction to Chemical Engineering | Introduces design in chemical engineering, teaming, chemical engineering profession, computer models, communication skills, quality and customer satisfaction. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 2 | | Pre-requisite: Ira A. Fulton School of Engineering and University College student |
| CHE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 211 | Introduction to Chemical Processing | Applies chemical engineering analysis and problem solving to chemical processes material and energy balance methods and skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): CHM 116 with C or better; MAT 266 or 271 with C or better |
| CHE | 231 | Introduction to Transport Phenomena I: Fluids | Transport phenomena, with emphasis on fluid systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s) with C or better: CHE 211; MAT 266 or 271; PHY 121; Corequisite(s): MAT 274 or 275; Credit is allowed for only CHE 231 or 501 |
| CHE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHE | 334 | Introduction to Transport Phenomena II: Heat and Mass Transfer | Applies heat and mass transport principles. Design of heat exchangers and continuous contactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Chemical Engineering BSE major; CHE 231 with C or better |
| CHE | 342 | Introduction to Applied Chemical Thermodynamics | Applies conservation and accounting principles with nonideal property estimation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Biomedical Engineering BSE major with BME 200 with C or better OR Chemical Engineering BSE major with CHE 211 with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if completed |
| CHE | 352 | Chemical Engineering Lab I | Introduces engineering lab equipment, data collection, and analysis; strengthens ability to generate written reports and oral presentations; reinforces teamwork skills; strengthens and extends the understanding of earlier technical contents in the curriculum. | N | LAB | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 |
| CHE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |

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| CHE | 432 | Principles of Chemical Engineering Design | Multicomponent distillation, engineering economics, equipment sizing and costs, plant operation economics, and simulation and optimization techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334, 342, 442, and 433 with C or better |
| CHE | 433 | Modern Separations | Design of modern separation equipment in chemical engineering other than fractionation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better |
| CHE | 442 | Introduction to Chemical Reactor Design | Applies kinetics to chemical reactor design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better; Credit is allowed for only CHE 442 or CHE 505 |
| CHE | 451 | Chemical Engineering Laboratory II | Operation, control, and design of experimental and industrial process equipment; independent research projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 334 and 342 with C or better |
| CHE | 461 | Process Dynamic Control | Process dynamics, instrumentation, and feedback applied to automatic process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 211 with C or better |
| CHE | 462 | Process Design | Applies economic principles to optimize equipment selection and design; development and design of process systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; CHE 432, 433, and 442 with C or better |
| CHE | 469 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Chemical Engineering BSE major: CHE 342, or Civil Engineering BSE major: CEE 361, or Materials Science and Engineering BSE major: MSE 330; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CHE | 475 | Biochemical Engineering | Applies chemical engineering methods, mass transfer, thermodynamics, and transport phenomena to industrial biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisite: CHE 334 and 442 |
| CHE | 476 | Bioreaction Engineering | Principles of analysis and design of reactors for processing with cells and other biologically active materials; applies reaction engineering in biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering BS or BSE student OR Graduate Engineering student |
| CHE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | |
| CHE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-7 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MSE 518, EEE 518, MAE 518, MSE 475, or CHE 518 |
| CHE | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| CHE | 543 | Thermodynamics of Chemical Systems | Classical and statistical thermodynamics of nonideal physicochemical systems and processes; prediction of optimum operating conditions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| CHE | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 561 | Advanced Process Control | Dynamic process representation, linear optimal control, optimal state reconstruction, and parameter and state estimation techniques for continuous and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CHE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): graduate Chemical Engineering student |
| CHE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): graduate CHE major |
| CHE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student |
| CHE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHI | 101 | First-Year Chinese I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Credit is allowed for only CHI 101 or MND 101 |
| CHI | 102 | First-Year Chinese II | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 101; Credit is allowed for only CHI 102 or MND 102 |
| CHI | 110 | Intensive Chinese I | Adopts different pedagogical approaches to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, appropriate cultural information related to language use is also an important component of instruction. Trains students to be able to function successfully in Chinese culture. Students don't simply learn to "speak Chinese" or read and write characters as some form of party trick. Teaches a practical skill set that allows students to communicate and behave appropriately in Chinese culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| CHI | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre/Co-requisites: ENG 101, 105, or 107; Credit is allowed for only SLC 120 or CHI 120 |
| CHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| CHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 201 | Second-Year Chinese I | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 102; Credit is allowed for only CHI 201 or MND 201 |
| CHI | 202 | Second-Year Chinese II | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 201; Credit is allowed for only CHI 202 or MND 202 |
| CHI | 205 | Chinese Calligraphy | Introduces styles and techniques of Chinese writing. Requires no knowledge of Chinese or Japanese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |

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| CHI | 210 | Intensive Chinese II | Intensive 2nd-year college-level Modern Standard Chinese designed for students who are highly motivated and have successfully completed at least 1st-year college-level Modern Standard Chinese language course or equivalent. Reviews and reinforces 1st-year Chinese grammatical patterns and introduces new ones in order to further develop students' communicative competence in listening, speaking, reading and writing in modern Chinese. Introduces over 500 new characters and presents and expands an equal number of spoken vocabulary items. Students increase their vocabulary, consolidate their grammar, describe objects and express ideas more accurately and fluently. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): CHI 102 or 110 with C or better |
| CHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 301 | Third-Year Chinese I | Expansion of proficiency in listening comprehension, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 202 with C or better |
| CHI | 302 | Third-Year Chinese II | Continuation of CHI 301. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 301 with C or better |
| CHI | 307 | Introduction to Literary Chinese I | Reading in various genres of pre-20th century literature (wen-yen), with analysis of the structure of the classical writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 302, JPN 202, or KOR 202 with C or better |
| CHI | 308 | Introduction to Literary Chinese II | Continuation of CHI 307. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 307 with C or better |
| CHI | 321 | Chinese Literature | Masterworks of the tradition from the 7th century BCE through the 13th century. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| CHI | 322 | Chinese Literature | Masterpieces from the later tradition and its transition to modern times. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| CHI | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| CHI | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| CHI | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| CHI | 338 | The Daoist Bible: The Dao de jing | At 5,000 words, the Dao de jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| CHI | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; 24 or more hours; Credit is allowed for only CHI or REL 343 |
| CHI | 345 | Chinese Film and Civilization | Screening and discussion of recent films from China, Taiwan, and Hong Kong in the context of modern Chinese civilization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| CHI | 348 | Pathways into Chinese Culture | Introduces some important aspects of China's cultural history and traditions. Provides an overview of Chinese history and culture and reviews major developments in science and technology. Incorporates current social and cultural topics and reviews through the lens of historical context. Classroom activities enable students to gain a better understanding of traditional Chinese culture with respect to both elite and popular culture. Conducted in Mandarin and is designed for the students who are currently enrolled in CHI 301 and CHI 401 or whose Chinese proficiency level in all four skills (speaking, listening, reading and writing) are at the intermediate mid to intermediate high level according to ACTFL guidelines. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): CHI 202 with C or better. Credit is allowed for only CHI 348 or CHI 394 (Pathways into Chinese Culture) |
| CHI | 380 | The Chinese Language | Introduces the Chinese languages from linguistic perspectives. Topics include the linguistic structure and characteristics (phonetics, phonology, morphology and syntax) of the Chinese language; linguistic history and dialects of Chinese; and its relationship with culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| CHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 401 | Fourth-Year Chinese I | Focuses on solidifying and improving students' knowledge of modern Mandarin. Emphasizes learning strategies to increase reading and listening comprehension, as well as further strengthening oral fluency and written skills. Surveys a wide variety of original text and media materials, in both full-form and simplified characters. Conducted in Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 302 with C or better |
| CHI | 402 | Fourth-Year Chinese II | Continuation of CHI 401. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 401 with C or better |

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| CHI | 407 | Chinese for Academic and Professional Purposes I | Part of the Chinese Flagship program; course has a three-fold objective: (1) to improve language proficiency in all four language skills; (2) to support other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; and (3) to develop the use of explicit language learning strategies that support professional-level literacy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 402 with C or better |
| CHI | 408 | Chinese for Academic and Professional Purposes II | Part of the Chinese Flagship Program. Improves language proficiency in all four language skills; supports other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; develops the use of explicit language learning strategies that supports professional level literacy. All course work in Mandarin Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 407 with C or better |
| CHI | 430 | Readings in Chinese Religions | Readings in Chinese religious texts, including Buddhism, Daoism, local religious cults, and others. May be repeated once for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 (CHI 414) with C or better |
| CHI | 450 | Classical Prose | Readings in classical prose forms, including guwen, sanwen, pianji wen, fu, and incidental writings. Course content varies with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 with C or better |
| CHI | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| CHI | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| CHI | 461 | Classical Vernacular Performance Literature | Readings in performance literature in colloquial Chinese. Bianwen, zhugongdiao, baojuan, zaju, chuanqi drama. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 307 with C or better |
| CHI | 462 | Readings in Traditional Xiaoshuo | Readings in the shorter and longer fiction of the late imperial period written in classical vernacular language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 470 | Modern Chinese Literature and Culture | Readings in modern Chinese literary texts, including prose, fiction, and poetry. Course content changes with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: CHI 302 with C or better |
| CHI | 482 | History of the Chinese Language | Introduces the history of the Chinese language. Graduate/advanced undergraduate-level introductory course on the historical changes of the sounds, writing system, grammar, and other aspects of the Chinese language. Topics include the historical phonology of Chinese, development of graphs (Hanzi), some topics of syntactic changes in texts, morphology, lexicography, cultural implication of language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| CHI | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 509 | Methods of Research in Chinese Applied Linguistics | Offers an overview of issues in applied linguistics, specifically related to the teaching and learning of Chinese as a second language. Divided according to broad topics and may vary depending on interests and background of class participants. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed only for CHI 509 or 591 (Chinese Applied Linguistics) |
| CHI | 514 | Advanced Classical Chinese | Close readings in selected premodern texts, with focus on special grammatical features, and increased vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 520 | Teaching of Chinese as a Second Language | Theory and practice of teaching Chinese, including presentation, interaction, and evaluation, with consideration given to cultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 561 | Readings in Traditional Xiaoshuo | Introduces major issues, texts, and resource materials for the study of narrative forms, including short stories and longer works of fiction. Focuses on the period from 1400 to 1900. One year of university-level classical Chinese or equivalent proficiency; three years of university-level modern Chinese recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| CHM | 107 | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | |
| CHM | 108 | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: CHM 101, 114, 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisites: CHM 231 with C or better |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 480 | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | |
| CHM | 107 | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | |
| CHM | 108 | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre/Co-requisite: CHM 107 |

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| CHM | 111 | General Chemistry Laboratory for Majors I | Laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 117 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre- or corequisite(s): CHM 117 with C or better if completed; Biochemistry, Biophysics or Chemistry major |
| CHM | 112 | General Chemistry Laboratory for Majors II | Continuation of CHM 111 laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 118 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Prerequisite(s): CHM 111 with C or better; Biochemistry, Biophysics or Chemistry major. Pre- or corequisite(s): CHM 118 with C or better if completed |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 114 | General Chemistry for Engineers | Chemical principles with emphasis toward engineering. Students without high school chemistry or are chemical engineering majors must enroll in the CHM 113, 116 sequence instead of CHM 114. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 117 | General Chemistry for Majors I | Lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the CHM 111 laboratory course. Covers electronic structure of atoms and molecules, intermolecular forces, bonding models, molecular geometry, physical states of matter, gas laws, and chemistry of condensed matter and modern materials. Highlights chemical reactivity, periodic trends and descriptive chemistry. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Prerequisite(s): Biochemistry, Biophysics, or Chemistry major; minimum Math Placement Test score of 60% and minimum Advanced Placement Test of 38% or Pre- or corequisite(s): MAT 265 or 270 with C or better if completed |
| CHM | 118 | General Chemistry for Majors II | Continuation of CHM 117 lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the major's CHM 112 laboratory course. Topics include thermodynamics, properties of solutions, chemical equilibrium, aqueous chemistry, acids and bases, electrochemistry, chemical kinetics, nuclear chemistry, coordination chemistry. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Prerequisite(s): Biochemistry, Biophysics, or Chemistry major; CHM 117 with C or better; MAT 270 with C or better; Pre- or corequisite(s): MAT 266 or 271 with C or better if completed |
| CHM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | Pre-requisites: Biochemistry or Chemistry major; Maximum 45 hours |
| CHM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Pre-requisites: CHM 101, 114, 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre/Co-requisites: CHM 231 with C or better |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better; if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 240 | Mathematical Methods in Chemistry | Introduces mathematical/computational methods in chemical kinetics, thermodynamics, quantum chemistry. Mathematical-based computer lab. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Molecular Sciences | 3 | CS | Pre-requisite: CHM 116 (or 118) with C or better; Pre/Co-requisites: MAT 272 or MAT 267 with C or better if completed |
| CHM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 302 | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |

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| CHM | 303 | Environmental Chemistry Laboratory | Lab in environmental chemistry to complement CHM 302. First-hand experience with sampling methods, analytical techniques, and environmental lab methods. Both CHM 303 and CHM 348 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 2 | L | Pre/Co-requisites: CHM 302 with C or better if completed |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 327 | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | 328 | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | 333 | Organic Chemistry for Majors I | Structures, reaction mechanisms and kinetics, and systematic syntheses of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 334 | Organic Chemistry for Majors II | Continuation of CHM 333. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 333 with C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 337 | Organic Chemistry Laboratory for Majors I | Emphasizes mechanisms, kinetics, and products of organic reactions. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre-requisites: Biochemistry or Chemistry major; Pre/Co-requisite: CHM 333 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 338 | Organic Chemistry Laboratory for Majors II | Continuation of CHM 337. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre-requisites: Biochemistry or Chemistry major; CHM 337 with C or better; Pre/Co-requisites: CHM 334; Credit is allowed for only CHM 238 or 338 |
| CHM | 341 | Elementary Physical Chemistry | Thermodynamics, equilibrium, states of matter, solutions, and chemical kinetics. For students in premedical, biological, and educational curricula. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 114, 116 or 118 with C or better; CHM 231, 233 or 333 with C or better; MAT 210, 251, 265 or 270 with C or better; PHY 101, 112 or 131 with C or better. |
| CHM | 343 | Elementary Physical Chemistry Laboratory | Physical chemistry experiments. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisite: CHM 341 with C or better if completed; Credit is allowed for only CHM 343 or 348 and 349 |
| CHM | 345 | Physical Chemistry I | Introduces quantum chemistry with application to electronic structure and dynamics of atoms and molecules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: CHM 116 (or CHM 118); CHM 240 (OR both MAT 274 [or MAT 275] and MAT 242 [or MAT 342 or 343] OR PHY 201); MAT 267 (or MAT 272); PHY 131 (or PHY 151) |
| CHM | 346 | Physical Chemistry II | Introduces equilibrium and statistical thermodynamics. Laws of thermodynamics, equations of state, multicomponent chemical and phase equilibria, and electrochemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 345 with C or better |
| CHM | 348 | Physical Chemistry Laboratory I | Lab experiments in spectroscopy and computational chemistry. To secure L General Studies credit the following must be taken: CHM 303 & CHM 348 or CHM 348 & CHM 349 & CHM 452. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisite: CHM 345 with a C or better if completed |
| CHM | 349 | Physical Chemistry Laboratory II | Lab experiments in thermodynamics, electrochemistry, and computational chemistry. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisites: CHM 346 with C or better if completed |
| CHM | 385 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| CHM | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| CHM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 424 | Separation Science | Basic theory and practical aspects of gas, liquid, ion-exchange, and gel-permeation chromatographies, and other important industrial and research techniques. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234, or 334, or 346, with C or better |
| CHM | 433 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234 or 334 with C or better; CHM 341 or 346 with C or better; Credit is allowed for only CHM 433 or 531 |
| CHM | 434 | Advanced Organic Chemistry II | Continuation of CHM 433. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 433 or CHM 531 with C or better |
| CHM | 435 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 or BCH 461 or CHM 460; BIO 353; CHM 234 or CHM 334. Credit is allowed for only CHM 435 or CHM 535 |
| CHM | 452 | Inorganic Chemistry Laboratory | Preparation and characterization of typical inorganic substances, emphasizing methods and techniques. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisite: CHM 453 with C or better if completed |
| CHM | 453 | Inorganic Chemistry | Principles and applications of inorganic chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 341 or CHM 346 with C or better |
| CHM | 460 | Biological Chemistry | Structure and function of macromolecules and their involvement in the processing of energy and information by living cells. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234 (or 334) with C or better; CHM 346 with C or better |
| CHM | 471 | Solid-State Chemistry | Crystal chemistry, thermodynamics and electrochemistry of solids, nonstoichiometric compounds, diffusion and solid state reactions, crystal growth, and selected topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre/Co-requisite: CHM 346 with C or better if completed; Credit is allowed for only CHM 471 or 571 |

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| CHM | 480 | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | |
| CHM | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| CHM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | |
| CHM | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better; Credit is allowed for only GLG 485 or CHM 485 |
| CHM | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 302, GLG 321 or GLG 481 with C or better; Credit is allowed for only CHM 489, GLG 489 or 490 (Field Geochemistry) |
| CHM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-7 | L | |
| CHM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| CHM | 501 | Current Topics in Chemistry | | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate students (degree and non-degree); Credit is allowed for only BCH 520 or CHM 520 |
| CHM | 523 | Advanced Analytical Chemistry | Theoretical principles of analytical instrumentation and measurements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 524 | Separation Science | Addresses principles and applications for all areas of chemical separations. Emphasizes separations principles in microfluidics and its interface with nanotechnology and traditional electronic materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 531 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, molecular orbital theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only CHM 433 or CHM 531 |
| CHM | 532 | Advanced Organic Chemistry II | Organic mechanisms, thermodynamic and kinetic control, structure/activity relationships, isotope effects, multistep reactions, reactive intermediates, radical reactions, electron transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 535 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate degree or non-degree seeking students; Credit is allowed for only CHM 435 or 535 |
| CHM | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| CHM | 541 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 541 or MSE 524 |

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| CHM | 543 | Computational Chemistry | Provides basic concepts and practical experience in computational chemistry as applied to molecules and solids. Systematically covers theoretical background and applied aspects of electronic structure methods/simulation, and related visualization techniques. Provides weekly laboratory session will provide hands-on experience with state-of-the-art molecular and solid-state simulation/visualization packages, with an emphasis on their reliability, predictive capability and practical limitations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Pre/Co-requisite: CHM 545 |
| CHM | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| CHM | 545 | Quantum Chemistry | Wave and matrix formulation of quantum mechanics applied to the vibrational, rotational, and electronic states of polyatomic molecules. Hartree-Fock, electron correlation, and molecular orbital theory. Selection rules and introduction to group theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 546 | Molecular Spectroscopy and Group Theory | Applies quantum mechanics to the general problem of the interaction of light with molecular systems. Angular momentum and group theory. Symmetry classifications. Overview of the formalism and experimental techniques in different resonant-based spectroscopies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 549 | Advanced Topics in Physical Chemistry | Various advanced and special topics in physical chemistry. Previous topics included: supercooled liquids and the glass transition, vibrational spectroscopy of solids, phase transitions and critical phenomena. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 553 | Advanced Inorganic Chemistry | Principles of modern inorganic chemistry applied over the entire periodic system. Bonding theory, chemical reactivity, spectroscopic and magnetic properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 571 | Structure, Bonding, and Symmetry in Materials | Principles of structural and materials chemistry, emphasizing crystal chemistry. Symmetry of periodic structures (space groups), factors determining bond lengths and coordination geometries, and the role of structure in determining physical properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only CHM 471 or 571 |
| CHM | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only CHM 581 or PHS 581 |
| CHM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 302 | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 327 | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | 328 | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| CHM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| CHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | College of Health Solutions | College of Health Solutions | 1-4 | | |
| CHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |

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| CHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | |
| CHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | |
| CHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| CIM | 105 | Introduction to the Concrete Industry | Overview of the history, career opportunities, job functions, and professional organizations in the concrete industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CIM | 106 | Fundamentals of Concrete: Properties and Testing | Examines effects of concrete-making materials on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisite: CIM 105 with C or better; Co-requisite: STP 226 |
| CIM | 205 | Concrete Construction Methods | Forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing, and curing concrete for foundations and other structural members. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 106 with C or better; CON 252 |
| CIM | 206 | Application of Concrete in Construction | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 205 with C or better; CON 243 with C or better |
| CIM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 305 | Management of Concrete Products: Ordering and Delivering | Basic understanding of managing the order and delivery process common to all concrete products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better; CON 221 with C or better |
| CIM | 306 | Management of Concrete Products: Production Facilities | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 305 and CON 251 with C or better; CON 271 |
| CIM | 405 | Concrete Problems: Diagnosis, Prevention, and Dispute | Diagnose and prevent problems related to concrete production, testing, construction, and performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better |
| CIM | 406 | Concrete Industry Management Capstone | Intensive study of a problem appropriate to the major and the student's career interests. Lecture, student presentations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisites: Construction BS student; CIM 405 with C or better; COM 225 |
| CIM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CIS | 105 | Computer Applications and Information Technology | Introduces business information systems from a business intelligence perspective and the uses of application software with emphasis on database and spreadsheet packages for efficient and effective problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | |
| CIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-3 | | |
| CIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | |
| CIS | 235 | Introduction to Information Systems | Survey course introducing the competitive and strategic uses of information systems, how information systems are transforming organizations and their management, and the issues, difficulties, and opportunities facing the technology professional and business manager today. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: CIS 105, 200 or 220 with C or better; MAT 210, 270, 211 or 271 with C or better; Credit allowed for only CIS 235 or CIS 236 |
| CIS | 236 | Honors Introduction to Information Systems | Introduces strategic leveraging of IS solutions and surveys different facets of IS in order to gain an understanding of how business problems are addressed and opportunities realized. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | Prerequisite(s): Barrett Honors student |
| CIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Accountancy or Computer Information Systems BS or PRE student |
| CIS | 300 | Web Design and Development | Focuses on Web site development, including target audience, image presentation, page/content topic organization, site navigational functionality, implementation needs, and future needs. Web site design and development practice using business software products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: Minimum 2.0 ASU cumulative GPA AND minimum 56 earned hours, OR be post-bacc undergraduate, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| CIS | 308 | Advanced Excel in Business | Covers advanced Excel skills using an applied focus on different types of decisions one may analyze using spreadsheet capabilities; graphs and charts to communicate complex analytics; pivot tables to slice and dice data for reporting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or CIS 236 with C or better; minimum 45 hours. credit is allowed for only CIS 308 or CIS 394 (Advanced Excel in Business) |
| CIS | 309 | Business Process Management | Flow charting, swimlane diagramming, process simulation using modern tool suites. Teaches the types of process evaluation decision analytics most commonly used and covers applied process analysis in a variety of contexts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. credit is allowed for only CIS 309 or CIS 394 (Process Management) |

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| CIS | 311 | Business Project Management | Overview of project management emphasizing the fundamentals and analytics that can support project decision making. Covers project planning, resource and disruption management and problem resolution skills. Leverages widely available project management computer tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 311 or CIS 394 (Project Management - Information Systems) |
| CIS | 315 | Introduction to Business Data Analytics | Overview of analytics in the business context, concepts of strategic and operational analytics; overview of concepts like dimensional modeling, the Model Lifecycle, data mining, big data, KPIs and metrics, ERP and analytics, in-database/memory analytics; real-time analytics and data stream analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) with C or better: CIS 235 (or CIS 236); ECN 221; MAT 211; BS Business Data Analytics major |
| CIS | 340 | Business Information System Development I | Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to plan and analyze the needs of modern business information system development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey CIS BS student; ACC 241, 242 or 271 with C or better; CIS 235 or 236 with C or better; ECN 221 with C or better; MAT 211 with C or better. |
| CIS | 345 | Business Information System Development II | Provides a clear understanding of the Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to design, implement, and support modern business information systems development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Computer Information Systems BS student; CIS 340 with C or better |
| CIS | 355 | Business Data Warehouses and Dimensional Modeling | SQL, stored procedures and data warehouse architectures; data warehouse requirements definition, design and analysis; overview of the steps in building information-enabled business models; role of data warehousing in data mining and analytics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): BS Business Data Analytics major. Corequisite(s): CIS 315 |
| CIS | 360 | Business Database Concepts | Database theory, design, and application, including the entity-relationship model; the relational, hierarchical, and network database models; and query languages. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Accountancy BS student and CIS 105 or 236; ACC 231, 232 or 261; ACC 241, 242 or 271 with C or better |
| CIS | 365 | Business Database Systems Development | Focuses on business database and data warehousing systems, development and management. Topics include capturing business requirements using data modeling, SQL, data security, operational and analytical data stores and data integrity. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): Computer Information Systems BS major, CIS 235 or 236 with C or better |
| CIS | 375 | Business Data Mining | Building predictive analytics (e.g., SEMMA, KDD); exposure to logistic regression, machine learning and decision tree methods; Understanding lift factors, ROC curves; hands-on use of mining software; business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: Minimum 2.0 ASU cum GPA and minimum 56 earned hours, OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| CIS | 405 | Business Intelligence | Business intelligence (BI) is a term describing a broad category of applications, technologies, architectures and processes for gathering, storing, accessing and analyzing data to provide business users with timely information to enable better insights into project and process management and evidence-based decision making. BI is based on techniques for data decision capture, cleansing, validation, warehousing and analytics to help decision makers improve decision outcomes. Provides a capstone understanding of the concepts of managing data resources and the development of business intelligence capabilities using data visualization, data warehousing, data mining, online analytical processing decision support systems and other advanced BI topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 394 (Business Intelligence) or 405 |
| CIS | 415 | Big Data Analytics and Visualization in Business | Text and stream mining, visualizations for big data, Hadoop, cloud-based solutions, fundamentals of big data programming, social media and big data, NoSQL, software tool support for visualizations; GIS, business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 425 | Electronic Commerce Strategy | Key business strategies and technology elements of contemporary electronic commerce. Covers Web design and interactions between Web pages and databases. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Computer Information Systems BS student; CIS 360 or 365 with C or better |
| CIS | 430 | Networks and Distributed Systems | Advanced topics such as communications protocols, distributed systems, network security and client-server systems; applications based on platforms such as .NET and networked UNIX. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Computer Information Systems student; ACC 330 or 444; CIS 340 or 410 with C or better; Pre/Co-requisite: CIS 360 or 365 |
| CIS | 440 | Systems Design and Electronic Commerce | Systems design for organizational and electronic commerce systems; use of project management and systems analysis and design tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | L | Pre-requisites: W.P. Carey Computer Information Systems BS student; CIS 360 or 365 with C or better; CIS 430 with C or better |
| CIS | 450 | Enterprise Analytics | Model lifecycle analysis, analytics governance, aligning governance, aligning firm and analytics strategy, big data security issues, enterprise search, applied projects. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) with C or better: CIS 355, 375, 415; BS Business Data Analytics major |
| CIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey CIS BS student |
| CIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |
| CIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: W.P. Carey ACC BS or CIS BS student |
| CIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |

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| CIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-7 | L | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-3 | | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 502 | Information Systems | Organizational, strategic, and technical issues of the management of information. Evaluation, design, and use information systems as competitive advantage. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: W.P. Carey MBA student |
| CIS | 505 | Introduction to Enterprise Analytics | Ensuring the foundational understanding of contextualized analytics within the business enterprise continuum by covering how data flows and is managed across the landscape of enterprise business processes. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey Graduate student |
| CIS | 506 | Information Management | Addresses central issues in managing information to achieve competitive advantage and support innovation. Specific topics covered include data quality, data modeling using both entity relationship models and star schemas, data governance, document management, document search, enterprise performance management and visualization techniques. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Prerequisite(s): graduate W. P. Carey major |
| CIS | 508 | Data Mining I | Charting a roadmap for data-driven decision making and getting a practical understanding of how IT tools and techniques can allow managers to extract predictive analytics and patterns from primarily numeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey Graduate student |
| CIS | 509 | Data Mining II | Uses tools and techniques to analyze unstructured data that are applied to business problems to support informed decision making and the extraction of predictive analytics and patterns from primarily nonnumeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-req for CIS 509 |
| CIS | 510 | Business Process and Workflow Analysis | Builds foundations for process analysis by focusing on information, documents, people, roles and business rules. Provides an introduction to various techniques and tools of process analysis, including an understanding of organizational issues in rolling out change initiatives. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major. Credit is allowed for only CIS 510 or CIS 591 (Business Process Workflow Analysis) |
| CIS | 512 | Business Intelligence | Understanding how organizations make use of Business Intelligence (BI) to gain a sustainable competitive advantage. Builds the foundations for evidence-based managerial decision making. Covers technologies for data warehousing and data mining from a managerial perspective. Covers contemporary topics such as real-time BI, business analytics, and business performance management with the help of case studies, audio-video content, guest speakers, online forums to generate creative thinking and discussion. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Prerequisite(s): W.P. Carey graduate major |
| CIS | 515 | Business Analytics Strategy | Evaluating, strategically aligning, planning for and directing investments in and governance of processes for continuous renewal of analytics deployments in business. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey graduate major |
| CIS | 525 | Strategic Value of Information Technology | Instills balanced and disciplined view of IT and business with their interplay. Assigns cases and assignments involving the symbiotic relationship of IT and business to provide real-world exposure for critical thinking and engaging discussion. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 525 or CIS 591 (Strategic Value of Information Technology) |
| CIS | 540 | Enterprise Information Security and Controls | Provides a broad survey of information security and controls, utilizing the COBIT framework to illustrate how information security and controls contribute to effective IT governance. Develops an understanding of the issues associated with information security and effective IT governance, with particular emphasis on how management contributes to the effectiveness of an organization's information security program. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major. Credit is allowed for only CIS 540 or CIS 591 (Information Security & Controls) |
| CIS | 545 | Managing Enterprise Systems | Investigates major categories of enterprise systems, factors driving software adoption and keys for successful implementation. Pays special attention to evaluating the potential impact of emerging technologies on business environments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 545 or CIS 591 (Enterprise Systems) |
| CIS | 560 | IT Services and Project Management | Provides an overview of the project management process groups and knowledge areas (defined by the PMBOK) and focuses on the application of key concepts, tools and techniques for delivering on-time, on-budget IT project and services that meet end-user needs. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 560 or CIS 591 (IT Services and Project Management) |
| CIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |

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| CIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey Info Systems PhD student |
| CIS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CMN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 502 | Theory and Practice in Communication and Persuasion | Theoretical exploration of communicative and persuasive practices as applied in various contexts. Surveys classical, modern, and contemporary theories of persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 505 | Methods in Applied Communication Research | Examines the intellectual, practical, and ethical dimensions of engaging in applied research. Emphasizes empirical and quantitative methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 506 | Humanistic Inquiry and Field Research in Communication | Examines interpretive, critical, and rhetorical approaches to communication and advocacy, including hermeneutics, ethnography, and cultural studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |

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| CMN | 515 | Ethical Issues in Communication Advocacy | Examines the ethical issues or concerns related to communication advocacy. Variable topics; examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 516 | Mediation and Dispute Resolution | Examines advocacy's role in fair negotiation and effective and successful dispute resolution. Examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 520 | Communication Campaigns | Explores public communication strategies aimed at advocating for general or specific audiences and/or for particular issues and causes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 522 | Argumentation and Advocacy | Introduces various models of argumentation and their applications to various spheres of advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts students |
| CMN | 531 | Communication and Social Change | Examines human communication and technologies of communication as agents of social change within groups, communities, organizations, and/or cultures. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 532 | Advocacy in Interpersonal Settings | Examines particular relational contexts in which advocacy plays a pronounced role (e.g., personal, family, and service provider relationships). | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 550 | Advocacy in Organizational Settings | Examines issues of upward influence, the expression of dissent, and grievance systems within organizational contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 551 | Democracy and Power in Organizations | Examines structural, historical, relational, and symbolic dimensions of organizational communication and discourses that foster or impede communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 557 | Communication and Technology | Assesses technology's role in the social dynamics of human interaction. Emphasizes the impact of technology with regard to communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 565 | Globalization and Advocacy | Explores the forces leading to increased intergroup contact and their impact on social, economic, and political dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 570 | Communication and Advocacy in Social Context | Variable topics course exploring the intersection of communication and advocacy in specific contexts not addressed in other elective courses. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CMN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |
| CNE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |
| CNE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CNE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |

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| CNE | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CNE | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes Horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |
| CNE | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; Credit is allowed for only CON 271 or CNE 271 |
| CNE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CNE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | BSE Civil Engineering or BSE Construction Engineering major; CEE or CNE 212; CEE or CNE 213 with C or better. Pre- or corequisite(s): CEE or MAE 384 with C or better if completed OR BS Construction Mgt major. Credit is allowed for only CEE or CNE 321 |
| CNE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major. Credit is allowed for only CEE or CNE 351 |
| CNE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major. Credit is allowed for only CEE or CNE 353 |
| CNE | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction BS major; CON 243 and 252 OR Construction Engineering BSE major; CON 243; Credit is allowed for only CON 383 or CNE 383 |
| CNE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 400 | Earth Systems Engr & Mgmt | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CNE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better. Credit is allowed for only CEE 420 or CNE 420 |
| CNE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better. Credit is allowed for only CEE or CNE 421 |
| CNE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better. Credit is allowed for only CEE 452 or CNE 452 |
| CNE | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271 and CON 383 or CNE 383 with C or better; Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CNE | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 453 or CNE 453 with C or better; Pre- or corequisite(s): CON 495 or CNE 495 with C or better if completed; Credit is allowed for only CON 455 or CNE 455 |
| CNE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction Management BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CNE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | L | Pre-requisites: Civil Engineering BSE student; CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student; CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486 |
| CNE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction Management BS major or Construction Engineering BSE major; CON 383 or CNE 383; Credit is allowed for only CON 495 or CNE 495 |
| CNE | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction BS major with CON 453 or CNE 453 with C or better OR Construction Engineering BSE major with COM 225 with C or better and CON 453 or CNE 453 with C or better; Credit is allowed for only CON 496 or CNE 496 |
| COE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| COE | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |

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| COE | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | 110 | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | 241 | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Non-Communication student; Minimum 25 hours |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 300 | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |

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| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 323 | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 326 | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 464 | Communicative Sexualities | Grounded in the discipline of communicology, provides an introduction to the qualitative research practice of semiotic phenomenology. Examines sexuality as a personal, social, historical, and cultural phenomenon, wherein communication is studied as the mediating force through which meanings are ascribed to sexuality and sexual experience. Sexuality is studied as it manifests among a wide variety of people, practices, and contexts. U.S. American culture provides the primary cultural context. Addresses basic questions including: How do we understand sexuality? How have we come to know what we know about sexuality? How do we understand the relationship between sexuality as personal desire, and sexuality as social norm in specific cultural contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Junior or Senior standing; Minimum 2.50 GPA; Credit is allowed for only COM 464 or 494 (Communicative Sexualities) |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): Communication major; minimum 56 hours; minimum 2.50 GPA; COM 225 with C or better; COM 308 with C or better |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 110 | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Maximum 24 earned hours |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| COM | 241 | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Non-Communication student; Minimum 25 hours |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 281 | Communication Activities | Nongraded participation in forensics or interpretation cocurricular activities. Maximum 3 semester hours each semester. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | |
| COM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 300 | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 319 | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | 320 | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |

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| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 323 | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 325 | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |
| COM | 326 | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | |
| COM | 327 | Civil Communication | Offers a theoretical understanding of civil communication and methods for applying civil communication practices in a variety of contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA; junior standing |
| COM | 341 | Social Contexts for Performance | Adaptation and performance of literature for the community outside the university. Research into the practical uses of performed literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 377 | Communication, Terrorism, and National Security | Surveys strategic communication and its relationship to terrorism challenges facing the United States and the rest of the world. Begins with a look at language and definitions, how strategic communication functions are traditionally conceptualized, and the scope and extent of the terrorism problem. Focuses on the contemporary problems of terrorism, including its extent, tactics, and strategies and strategies that aim to combat it. Concludes with a look at new frontiers in the terrorism struggle, including new media and communication approaches. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: minimum 2.50; minimum Junior standing; Credit is allowed for only COM 377 or 394 (Communication: Terrorism and National Security) |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 404 | Research Apprenticeship | Direct research experience on faculty projects. Student/faculty match based on interests. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 407 | Advanced Critical Methods in Communication | Examines critical approaches relevant to communication, including textuality, social theory, cultural studies, and ethnography. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 407 or 507 |
| COM | 408 | Quantitative Research Methods in Communication | Advanced designs, measurement techniques, and methods of data analysis of communication research. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 408 or 508 |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 414 | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 426 | Political Communication | Theories and criticism of political communication; including campaigns, mass persuasion, propaganda, and speeches. Emphasizes rhetorical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 441 | Performance Studies | Theory, practice, and criticism of texts in performance. Emphasizes the interaction among performer, text, audience, and context. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 and COM 308 with C or better |
| COM | 442 | Identity, Performance, and Human Communication | Explores communication dimensions of self and others as performance. Examines topics that include gender, race, sexuality, age, and ethnicity through performance. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 225 (or COM 241); Minimum 2.50 GPA |
| COM | 445 | Narrative Performance | Theory and practice of performing narrative texts (e.g., prose fiction, oral histories, diaries, essays, letters). Includes scripting, directing, and the rhetorical analysis of storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 with C or better |
| COM | 446 | Performance of Literature Written by Women | Explores, through performance and critical writing, literature written by women. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & C | Pre-requisite: Minimum 2.50 GPA |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 452 | Communication and the Art of Happiness | Examines how communication behaviors relate to constructing happiness and wellbeing. Topics include gratitude, forgiveness, social support, appreciation, social networks and communicative contagion of mood intersecting with issues of dyadic, group and organizational communication. Auxiliary readings come from a variety of disciplines, including psychology, management, sociology, positive organizational scholarship and appreciative inquiry. Course activities include reading, field exercises, journal writing, exams, project presentation(s) and papers. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: 2.50 GPA; Junior standing; Credit is allowed for only COM 452 or 494 (Communication of Happiness) |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 465 | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): Communication major; minimum 56 hours; minimum 2.50 GPA; COM 225 with C or better; COM 308 with C or better |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-7 | | |
| COM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 507 | Qualitative Research Methods in Communication | Qualitative research methods, including interviewing, field methods, and other nonquantitative techniques for analyzing communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications Graduate student; Credit is allowed for only COM 407 or 507 |
| COM | 508 | Quantitative Research Methods in Communication | Empirical research designs, measurements, and statistical strategies and techniques in analyzing and evaluating experimental and descriptive research in communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Communications Graduate student. Credit is allowed for only COM 408 or COM 508 |
| COM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| COM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 604 | Theory Construction in Communication | Review and analysis of philosophical problems inherent in communicative research and of metatheories designed to deal with these problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 607 | Contemporary Rhetorical Methods | Analysis of issues in the practice of rhetorical communication research, including criticism and scholarship. | N | SEM | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 608 | Multivariate Statistical Analysis of Data in Communication | Statistical analysis of communication research data. Multivariate procedures used in communication research and methods of causal analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 609 | Advanced Qualitative Research Methods in Communication | Analysis of issues in the practice of qualitative communication research, including data gathering, fieldwork issues, analysis strategies, and reporting results. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications PhD student |
| COM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisites: Communications PhD student; COM 600 or COM 608 with B or better; COM 601 or COM 700 with B or better |
| COM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| COM | 124 | Media and Culture | Introduces contemporary intercultural issues as expressed through various media in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | C | |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: minimum 25 hours |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 309 | Rhetorical, Interpretive, and Critical Methods in Communication | Examines humanistic and qualitative approaches to communication. Introduces textual, interactional and ethnographic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better; Minimum GPA of 2.0 |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 314 | Inner-City Families: The Cycle of Poverty | Examines issues and concerns that confront inner-city families. Blends theory and application. From a theoretical perspective, examines issues that affect families who live in the inner city (e.g., race and poverty), as well as specific skills and programmatic elements that are needed to work with families in an urban setting. In terms of application, provides an intensive service-learning-based experience. Engages students in specific service to an embedded inner-city organization for a minimum of 3 hours per week. Students work with the professor to determine appropriate service placements. | N | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 OR Junior standing; Credit is allowed for only COM 314 or 498 (Inner City Family) |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 319 | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | 320 | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 324 | Rhetoric and Media Criticism | Critical examination of media arts, including cinema, television, and video. Applies rhetorical, textual, and interpretive methods of criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 325 | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |
| COM | 342 | Oral History and Storytelling | Examines the formation of culture and history through research, presentations, the collection of oral history, and the telling of stories. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: ENG 101 or 102; Credit is allowed for only CMN 394 (Storytelling and Oral History), COM 342 or 394 (Storytelling and Oral History) |
| COM | 353 | Professional Communication | Introduces both verbal and written professional communication styles and technologies in preparation for communication-related internships and careers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |

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| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 383 | Communication and Mentoring | Explores the role of communication in face-to-face and online mentoring relationships with an emphasis on message shaping, nonverbal communication, professionalism and audience analysis. Applies practice and theory from a variety of lower-division communication courses (public speaking, professional and business, small group, intercultural and interpersonal) to prepare students for mentoring roles in the Communication Assessment Learning Lab (CALL) on ASU's west campus. During the semester, students (individually and as a member of a group) are engaged in creating and delivering both online and in-person public speaking tutorials. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 (or COM 110 or 230 or 259 or 263) with B or better; COM 225 with B or better; Credit is allowed for only COM 383 or 498 (Call Lab Mentorship) |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 414 | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 416 | Gender, Race, Colonialism, and Media | Explores how the mass media constructs gender and race and perpetuates colonial views of minorities and varied nationalities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 417 | Communication and Aging | Critical study of changes in human communicative patterns through the later adult years, with attention on intergenerational relationships and self-concept functions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 422 | Advanced Argumentation | Advanced study of argumentation theories and research as applied to public forums including: political, business, and legal contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: Minimum Junior standing; Minimum 2.00 GPA; ENG 101, 105, 107 or 111 with C or better |
| COM | 424 | Television Studies and Criticism | Surveys critical and historical approaches to television as a medium; to television research; and to television's effects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better or Junior standing with minimum 3.00 GPA |
| COM | 429 | Semiotics and Visual Communication | Semiotic analysis of mediated forms of communication, including film, television, and photography. Includes the political and aesthetic dimensions of images. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better OR Junior standing with minimum 3.00 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 451 | Communication and Work Relationships | Communication principles and practices associated with supervisory, peer, and client relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100; Minimum 45 completed hours; Minimum 2.50 GPA |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 454 | Rhetorical and Critical Approaches to Public Relations | An historical and contemporary account of how public relations messages build corporate identities and persuade audiences by shaping public values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better OR Junior standing with minimum 3.00 GPA; Credit is allowed for only COM 454 or CMN 598 (Rhetorical/Critical Approaches to Public Relations) |
| COM | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 457 | New Media | Explores how new communication and information technologies affect communication and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better OR Junior standing with minimum 3.00 GPA |
| COM | 459 | Theory and Methods of Social Media Networks | A network-based perspective plays an increasingly important role in our understanding of contemporary communication process of which much has shifted from a hierarchical, densely bounded group basis to a personalized, lateral network. Especially, along with the popularity of social media, social networking has become a key term that characterizes our everyday life. Discusses the role of new media technologies in evolving networked society, and how online networks are intertwined with our offline life. Covers theories and computerized methods that help understand online network structure. Includes lectures and discussions on theoretical issues with hands-on exercises of analytic methods. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): junior standing; minimum 2.50 GPA; MAT 142 or higher with C or better; Credit is allowed for only COM 459 or COM 494 (Social Networks) |

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| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 465 | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 471 | International Communication | Explores the political, economic, sociocultural, and communicative dimensions of mediated communication across borders and the processes of globalization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Pre-requisites: Minimum 2.0 GPA; CMN 463 or COM 463 with C or better |
| COM | 477 | Sport, Culture, and Discourses | Introduces sport as a global economic and cultural force, and as a foundational discourse experienced largely through media. Facilitates the understanding of sport as a major cultural and socializing institution and, thus, as a key site for the construction of knowledge, understandings, ideologies, and identities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 483 | Advanced Communication and Mentoring | Students serve as peer mentors in the Communication Assessment Learning Lab (CALL) with instructional emphasis on speaker apprehension, listening, the dynamics of group communication and leadership. Through experiential learning, mentors employ ethical peer tutoring practices by coaching undergraduates in managing public speaking apprehension, speech development and organization. Further, mentors provide on-the-spot feedback to undergraduates relating to delivery techniques, style, nonverbal communication, persuasive strategies and the use of presentational material. | N | LEL | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 383 with C or better |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Pre-requisites: Communication major or Public Relations and Strategic Communication minor student; Minimum 56 hours; Minimum 2.80 GPA; COM 225 (CMN 225) with C or better; COM 308 or 309 with C or better |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| COM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| CON | 100 | Introduction to Construction | Introduces construction industry sectors and professionals. Additional content includes developing personal competencies required of construction professionals. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 101 | Construction and Culture: a Built Environment | Analyzes the cultural context of construction, emphasizing its centrality in the evolution and expansion of built environments as expressions of ethical and historical value systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | HU & H & G | |
| CON | 106 | Introduction to Concrete Materials for the Built Environment | Effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Discusses concrete mixture proportioning along with the calculations and statistical analysis of strength testing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | SQ | |
| CON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 221 | Applied Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): MAT 170 or higher with C or better; PHY 111 with C or better; PHY 113 with C or better |
| CON | 223 | Strength of Materials | Analyzes strength and rigidity of structural members in resisting applied forces. Stress, strain, shear, moment, deflections, combined stresses, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): CON 221 with C or better |
| CON | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CON | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes Horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |

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| CON | 244 | Working Drawing Analysis | Provides the ability to read and understand architectural plans; to understand drawing symbols, dimensions, abbreviations, and terms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 251 | Microcomputer Applications for Construction | Applies the microcomputer as a problem-solving tool for the constructor. Uses spreadsheets, information management, and multimedia software. | N | LAB | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better |
| CON | 252 | Building Construction Methods, Materials, and Equipment | Emphasizes Vertical construction. Methods, materials, codes, and equipment used in building construction corresponding to the division of the CSI Master Format. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; Credit is allowed for only CON 271 or CNE 271 |
| CON | 273 | Electrical Construction Fundamentals and Project Management | Electrical construction, design, estimating, scheduling and project management. Electrical safety, blueprints and symbols, theory, sequence of installation. National Electrical Code (NEC). | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CON | 310 | Testing of Materials for Construction | Structural and behavioral characteristics, engineering properties, measurements, and application of construction materials. Not open to engineering students. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisite: Construction BS student; CON 221 with C or better; CON 223 with C or better |
| CON | 345 | Mechanical Systems | Design parameters and equipment related to heating and cooling systems for mechanical construction. Biorelated aspects of mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; PHY 111 (or PHY 121) with C or better; PHY 113 (or PHY 122) with C or better; CON 221 with C or better; CON 252 |
| CON | 377 | Residential Construction Production Procedures | Process used in residential construction. How a house is built: design, permits, scheduling, codes, contracting, site management, mechanical/electrical. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS or Design BSD student; CON 221 with C or better; CON 252 |
| CON | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction BS major: CON 243 and 252 OR Construction Engineering BSE major: CON 243; Credit is allowed for only CON 383 or CNE 383 |
| CON | 384 | Environmental Aspects of Heavy Construction | Methods, measures and analysis related to control of erosion, dust generation and storm water discharge during projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major. Pre- or corequisite(s): CON 243. Credit is allowed for only CON 384 or CON 394 (Environmental Aspects of Heavy Construction) |
| CON | 389 | Construction Cost Accounting and Control | Nature of construction cost. Depreciation and tax theory and variable equipment costs. Cash flow theory, investment models, profitability, and analysis. Computer applications. Funding sources and arrangements. Builder's insurance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Pre-requisite: Engineering and Design BS or BSD student; CON 221 with C or better; CON 251, or Construction Engineering student |
| CON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Pre-requisite: Engineering BS or BSE student |
| CON | 424 | Structural Design | Economic use of concrete, steel, and wood in building and engineered structures. Design of beams, columns, concrete formwork, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering Construction BS students; CON 223 with C or better. Pre/Co-requisite: CIM 205 or CON 310 (with C or better if completed) |
| CON | 430 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only CON 430 or CON 494 (Facilities Management/Operations & Maintenance) or CON 530 or CON 598 (Facilities Management/Operations & Maintenance) |
| CON | 446 | Marketing for Construction | Provides key marketing practices to include strategic planning, marketing collateral, networking, business development, and interview preparation for project pursuits. Covers all aspects of service-based marketing topics and practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): COM 225; CON 221 with C or better |
| CON | 448 | Sustainable Construction | Studies the principles associated with sustainable construction; problem definition, definition of sustainability, measures of sustainability, examination of current industry practices, financial and resource impacts of sustainable construction, independent student investigation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS or Civil (Sustainable Engineering) student; Senior standing; Credit is allowed for only CON 448, CON 494 or CON 598 (Sustainability in Construction) |
| CON | 450 | Geotechnical Applications for Construction | Soil formation, engineering properties and use as building materials. Soil's influence on construction of built environment, including specifications and biological aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Management BS student; CON 223 with C or better; CIM 106 or CON 310 with C or better |
| CON | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 271 or CNE 271 and CON 383 or CNE 383 with C or better; Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CON | 454 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods and materials required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CNE 243 or CON 243; Credit is allowed for only CON 454 or CON 494 (Trenchless Construction Mth) or CON 554 |
| CON | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS or Construction Engineering BSE major; CON 453 or CNE 453 with C or better; Pre- or corequisite(s): CON 495 or CNE 495 with C or better if completed; Credit is allowed for only CON 455 or CNE 455 |

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| CON | 457 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BS Construction Management or BSE Construction Engineering major; Pre/Co-requisite(s): CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 465 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing and efficient practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 465 or CON 565 |
| CON | 467 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 467 or CON 567 or CON 494 (Advanced Procurement Systems) |
| CON | 468 | Mechanical and Electrical Estimating | Analysis and organization of performing a cost estimate for both mechanical and electrical construction projects. Computer usage. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; CON 273; CON 345 and CON 383 with C or better |
| CON | 471 | Mechanical and Electrical Project Management | Specialty contracts and agreements, scheduling, material handling, labor unit analysis, and job costing for mechanical and electrical construction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite: Construction BS student; CON 453 with C or better |
| CON | 472 | Development Feasibility Reports | Integrates economic location theory, development cost data, market research data, and financial analysis into a feasibility report. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Pre-requisite: Construction BS or Design BSD student; REA 380 |
| CON | 477 | Residential Construction Business Practices | Topics addressed include development, marketing, financing, legal issues, and sales. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering BS or Design BSD student; MKT 382 or MKT 395 with D or better OR CON 446 with C or better; CON 377 with C or better; CON 389 with C or better |
| CON | 483 | Advanced Building Estimating | Concepts of pricing and markup, development of historic costs, life cycle costing, change order and conceptual estimating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; CON 383 with C or better |
| CON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction Management BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CON | 486 | Heavy Construction Estimating | Methods analysis and cost estimation for construction of highways, bridges, tunnels, dams, and other engineering works. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS major and CON 383 with C or better, or Construction Engineering BSE major |
| CON | 487 | Heavy Construction Project Management | Studies methods used to manage large magnitude heavy construction projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major; CON 243 (or CNE 243) with C or better; Credit is allowed for only CON 487 or 494 (Heavy Const Proj Mgmt) |
| CON | 488 | Heavy Construction Earthworks | Geotechnical issues with respect to foundation grading, forming and location for various types of infrastructure and transportation projects. Also includes streets, highway and embankment developments, retaining wall system, mechanically stabilized earth walls, and required quality control methods for these activities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CON 243; Credit is allowed for only CON 488 or CON 494 (Heavy Construction Earthworks) |
| CON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | | Prerequisite(s): Barrett Honors student |
| CON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction Management BS major or Construction Engineering BSE major; CON 383 or CNE 383; Credit is allowed for only CON 495 or CNE 495 |
| CON | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction BS major with CON 453 or CNE 453 with C or better OR Construction Engineering BSE major with COM 225 with C or better and CON 453 or CNE 453 with C or better; Credit is allowed for only CON 496 or CNE 496 |
| CON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-7 | | |
| CON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CON | 501 | Construction Research Methods | Data collection methodologies, applied parametric and nonparametric statistics, data analysis techniques, technical writing, and data presentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 530 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking). Credit is allowed for only CON 430, 494 (Facilities Management/Operations & Maintenance), 530 or 598 (Facilities Management/Operations & Maintenance) |

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| CON | 531 | Facility Management: Building Energy Management | Understand and learn energy management techniques in facilities management. Identifying and performing efficiency evaluations on various types of heating, ventilation and air conditioning systems in typical buildings. Concepts and methods of managing, adjusting and balancing equipment and systems for maximum facility performance. Facilities organizations best practices to maximize energy savings and performance, such as insulation usage, lighting optimization, energy management systems and commissioning procedures. Identification of ancillary benefits to energy-efficient building systems such as indoor air quality, sustainability and energy audits. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CON 531 or CON 598 (Facility Management Building) |
| CON | 532 | Facilities Project Management | Understand and learn project management techniques in facilities management. Stakeholder analysis, including roles, responsibilities and risk considerations. Asset owner and manager considerations within project components and deliverables. Development of project scope, requirements, schedules, budgets and communication plans from a facility manager's perspective. Best practices of facilities organizations for managing contract types, contract governance and performance management. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only CON 532 or CON 598 (Facility Project Management) |
| CON | 540 | Construction Productivity | Productivity concepts. Data collection. Analysis of productivity data and factors affecting productivity. Means for improving production and study of productivity improvement programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction MS or Construction Engineering MSE major |
| CON | 545 | Construction Project Management | Theory and practice of construction project management. Roles of designer, owner, general contractor, and construction manager. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction MS student; CON 495 with B or better |
| CON | 551 | Alternative Project Delivery Methods | Design/construction interaction; conceptual estimation and scheduling; the RFQ/RFP process; legal, insurance, risk allocation issues; procurement and selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 554 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues, and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods, and materials required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 557 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: MS or PhD Construction Management or MSE Construction Engineering major; Pre/Corequisites: CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 561 | International Construction | Investigation of the cultural, social, economic, political, and management issues related to construction in foreign countries and remote regions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering Graduate student |
| CON | 565 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing, and efficient practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only CON 465 or CON 565 |
| CON | 567 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CON 467, 567 or 494 (Advanced Procurement Systems) |
| CON | 570 | Introduction to Advanced Technology Facilities | Introduces advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. The constructor's viewpoint, including: planning, structures, mechanical, and tool installation. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 571 | Construction of Advanced Technology Facilities | Construction issues for advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. Issues include scheduling, cost estimating, project management, mechanical, safety, commissioning and tool hookup. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: CON 570 with C or better |
| CON | 575 | Information Technology in Construction | Uses virtual construction methodologies to improve the construction enterprise using communications, facility modeling, and decision making. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 589 | Construction Company Financial Control | Financial accounting and cost control at the company level in construction companies. Accounting systems. Construction project profit calculations. Financial analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering MS, MSE or PHD student |
| CON | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CON | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Prerequisite(s): Construction graduate student |
| CON | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 700 | Research Methods | Course on research methods in a specific discipline. | N | RSC | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |
| CON | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |
| CPI | 101 | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CPI | 200 | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |
| CPI | 101 | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 111 | Game Development I | Introduces video game design, art theory, and concepts as they apply to video game development. Basic art principles used in game development. Covers the fundamental video game art principles of 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. Also includes game design, game production, asset production, and game programming. Hands-on experience by creating 2-D game prototypes belonging to different video game genres and evaluating the techniques. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 200 | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |

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| CPI | 211 | Game Development II | Introduces the basics of 3D game development by using a game engine. Focuses on the pipeline of 3D game development including environment and contents creation, scripting to control components, and graphics user interfaces development. Develops several 3D games for multi platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 111 with C or better |
| CPI | 220 | Applied Data Structures and Algorithms | Thorough grounding in applied knowledge and skills related to algorithms and data structures used in the development of software designed to solve complex problems. Overview of computational and critical thinking skills that can be called upon to analyze and solve complex problems in multiple domains. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CSE 205 with C or better |
| CPI | 221 | Advanced Object-Oriented Principles Using Java | Advanced object-oriented programming using the Java language. Design concepts and problem solving. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CPI 220 with C or better |
| CPI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 310 | Web-Based Information Management Systems | Relational database design, entity-relationship modeling, relational algebra, SQL, database access through Web, Web data management, introduction to XML, fundamentals of Web application development, Web server architectures, lecture, in-class lab activities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 311 | Game Engine Development | State-of-the-art techniques for computer game design and programming with an emphasis on 3-D graphics and interaction. Focuses on a practical, example-driven approach to learning the unique art of 3-D game development. Topics include graphics game engines, textures, shader programming, artificial intelligence, physics, modeling, sound effects, and techniques for user interfaces. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 321 | Fundamentals of Game Art | Introduces art theory and concepts as they apply to video game development. Covers 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 350 | Evaluation of Informatics Systems | Methods for evaluation of informatics systems, including design of computational and human experiments, ethnography, and analytic techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s) with C or better: GCU 495 (or IEE 380 or STP 226 or 231 or 420); BS Informatics major |
| CPI | 360 | Decision Making and Problem Solving | Practical use of database systems, computer graphics, and modeling to inform decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 400 | Scientific Computing and Visualization | Introduces scientific computing and visualization, supported by data acquisition, geometric modeling, and computer graphics. Covers the necessary mathematical foundations, data structures, and algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 101 with C or better; CPI 200 with C or better |
| CPI | 411 | Graphics for Games | Examines real-time rendering of high-quality interactive graphics. Studies advances in graphics hardware and algorithms that make this possible. Examples of techniques and topics include nonphotorealistic rendering, occlusion culling, level of detail, terrain rendering, shadow generation, image-based rendering, and physical simulation. Helps students add graphics-related features to the game architecture developed in CPI 311. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |
| CPI | 412 | Cognitive Systems and Intelligent Agents | Advanced concepts and techniques of rule-based programming and agent architectures, incorporating ideas from artificial intelligence, cognitive psychology, and linguistics, along with their use in creating intelligent synthetic characters for interactive games and other virtual environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |
| CPI | 421 | 3-D Modeling and Texturing | Provides working knowledge of 3-D modeling, texture mapping, and paint concepts for the creation of 3-D video games art assets. Students work on concepts such as 3-D lighting, high polygon mesh rendering, and various third-party software and how to integrate them into the asset production pipeline. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CPI 211 with C or better |
| CPI | 422 | 3-D Animation and Rigging for Video Games | 3-D rigging, skinning, and 3-D animation techniques for video game development. Includes rotoscoping for character animation, animation loops, and integration of motion capture data, as well as prop animation. Covers operation of 3-D cameras and 3-D rendering. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 321 with C or better |
| CPI | 441 | Gaming Capstone | Industry-oriented course emphasizing the video game development process, technical skills, teamwork and communication among the students enrolled in the gaming certificate. Students partner with local industry involved in game development, visual art, and educational gaming and solve real-world problems by working in a team comprised of students from the three tracks available within the certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): BS Informatics or BIS (Computer Gaming) or Computer Gaming certificate; senior standing |
| CPI | 460 | Intelligent Interactive Instructional Systems | Intelligent interactive instructional systems serve as tutors, as learning companions or both. Covers their design, the technology that powers them, the learning theories that motivate them and results from experimental evaluations. Emphasizes intelligent tutoring systems, as they are a more mature technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better; Credit is allowed for only CPI 460 or CSE 494 (Intelligent Instr Sys) |

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| CPI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-12 | | |
| CPI | 485 | Informatics Capstone I | Team-based design of an informatics system; working with clients; development of requirements, use cases, class/object diagrams, and plans for quality assurance and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | L | Pre-requisite: CPI 310, 350 and CSE 463 with C or better; Informatics BS student |
| CPI | 486 | Informatics Capstone II | Implementation of the informatics system designed during CPI 485; work processes; keeping designs consistent with implementations; conducting QA and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 4 | L | Pre-requisite: Informatics BS student; CPI 485 with C or better |
| CPI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CPI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CPI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-3 | | |
| CPI | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-7 | | |
| CPP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 623 | Counseling At-Risk Youth | Examines the behaviors that place adolescents at risk for not achieving career goals and interventions to address these behaviors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 644 | Psychology of Careers | Advanced career counseling, including theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 |
| CPY | 645 | Professional Issues and Ethics | Ethical, legal, and professional issues of concern to practitioners and researchers functioning in a variety of settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 650 | Counseling Latinos | Survey course addressing mental health concerns and perspectives for individuals and families of Latino, Spanish-speaking origin. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 522 |
| CPY | 651 | Personality Assessment | Training in the use of major objective personality instruments to assess psychological symptoms; emphasizes MMPI-2 and MCMI-III. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 523 |
| CPY | 660 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |

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| CPY | 668 | Grant Writing and Grant Makers: The Washington Context | Develops successful proposals for educational research projects. Students gain experience writing for federal agencies, reviewing, and being evaluated on grant proposals. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CPY or HED 668 |
| CPY | 670 | Individual Differences | Focuses on definitions and assessment of ways humans vary on psychological constructs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 671 | Multicultural Counseling | Provides awareness of the influence of sociocultural variables on human development and explores implications for counseling minority populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 674 | Counseling Women | Explores women's development and its implications for counseling. Sexism in mental health, sex differences in diagnosis and psychopathology, and women's particular treatment needs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 675 | Health and Wellness Counseling | Theory, research, and practice in health and wellness counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CED 577 with C or better |
| CPY | 676 | Social Bases of Behavior | In-depth examination of contemporary research and theory in selected areas of social psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 677 | Advanced Counseling | Advanced topics in counseling theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 with C or better |
| CPY | 678 | Supervision Theory | Models of therapist development and clinical supervision. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 679 | History and Systems of Psychology | Examines the development and differentiation of the discipline of psychology from its origins in philosophy to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 694 | Substance Abuse: Therapy and Psychoeducation | Develops knowledge and skills for conducting psychotherapeutic and educational interventions to address substance use disorders and associated concerns. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 701 | Science and Practice of Counseling Psychology | Directed experiences involving the integration of theory, research, and practice in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 702 | Research Methods in Counseling Psychology | Applies experimental and/or quasi-experimental methods to theory construction and treatment evaluation in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COE 502 |
| CPY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |

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| CPY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CRD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| CRD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| CRD | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| CRD | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102 with a C or better; MAT 142 or higher with a C or better; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| CRD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: CRD, NLM, PRM or TDM 210 with C or better; CRD, NLM, PRM or TDM 301 with C or better; senior standing; 2.50 GPA; Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| CRD | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| CRD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 502 | Statistical and Data Analysis | Introduces descriptive and inferential methods used in community development, with an emphasis on nonprofit, tourism, and recreation sciences. Students gain experience using statistical software. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 530 | Community Services Management | Examines and applies organizational behavior, leadership, human resources, development, planning, and risk management to profession. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 552 | Critical Issues | Examines critical research issues in the leisure, recreation and tourism fields. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 555 | Theoretical Perspectives in Community Development | Reviews theoretical and empirical literature in community development with an emphasis on nonprofit, tourism, and recreation sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 569 | Advanced Tourism and Recreation Studies | Advanced study of tourism with an emphasis on relevant practices, theories, and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 570 | Social Aspects of Outdoor Recreation Management | Analyzes the social aspects of natural resource science, policy, and management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| CRD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |

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| CRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |
| CRD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 610 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. Considers issues at different scales, ranging from urban to rural, local to global, historical to contemporary. Critically examines the role of public, private, and nonprofit institutions in promoting quality of life. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 620 | Community Research Methods | Introduces community research methods, with emphasis on methodological questions and techniques relevant to contemporary community-based research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 640 | Research Seminar in Community Resources and Development I | A seminar designed to explore issues related to advancing a career as a researcher in the fields associated with community resources and development (i.e., nonprofit, recreation and parks, tourism). Critical to this study is an understanding of the conduct of high quality research, an understanding of issues that arise in professional settings (e.g., expediency vs. effectiveness), and ethical principles and processes that undergird research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |
| CRD | 650 | Research Seminar II | Helps prepare doctoral students to become productive and successful social scientists in community resources and development. Covers a wide range of topics under the broader conceptual umbrella of research, teaching, and service. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |
| CRD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |
| CRD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CRD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 100 | Introduction to Criminal Justice | Overview of the justice system. Roles of law enforcement personnel, the courts, and correctional agencies. Philosophical and theoretical views in historical perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 201 | Criminal Justice Crime Control Policies and Practices | Introduces concepts as the application of situational crime prevention strategies, problem-oriented crime control approaches, hot spots policing, defensible space, and crime prevention through environmental design. Students work to apply academic theory to actual crime problems in the local area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Credit is allowed for only CRJ 201 or 294 (Criminal Justice Crime Control) |
| CRJ | 203 | Courts and Sentencing | History and development of courts, trial by jury, and other dispute resolution mechanisms; selection and removal of judges and juries; organization, structure, and jurisdiction of courts; trial and nontrial processes of the judiciary. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 204 | Juvenile Justice | History and development of the juvenile court and the juvenile justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 225 | Introduction to Criminology | Provides a broad survey of criminal behavior and the major attempts to explain it. Topics include definitions and measurement of crime, theories of crime causation, and crime types. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Credit is allowed for only CRJ 225 or 294 (Introduction to Criminology) |
| CRJ | 230 | Introduction to Policing | Introduces policing in the United States covering the history of police, contemporary police work, and problems in policing. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 240 | Introduction to Corrections | Introduces the structure and function of the corrections system from historical and contemporary perspectives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 260 | Substantive Criminal Law | Criminal liability. Crimes against persons, property, and society. Governmental sanctions of individual conduct as formulated by legislatures and the courts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 270 | Community Relations in the Justice System | Focuses on developing an informed plan and policy for incorporating research findings about the surrounding community within various justice services and agencies. Topics include social stratification, minority groups, and victimology. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 284 | Professional Growth in Criminal Justice | Engages students in targeted field practice. Activities include: identifying and touring at two criminal justice agencies, conducting one professional interview, observing one court procedure, participating in small group discussions and exercises, enhancing interpersonal skills, video reviews, listening to professional guest speakers employed in the field, exploring and incorporating research tools, maintaining journal entries, developing one professional resume, and building opportunities to network professionally. | N | LEC | N | YGB | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 |
| CRJ | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 302 | Research Methods | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Also stresses methods for conducting research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L | Pre-requisite: MAT 117, 119, 142 (114), 170, 210, or 270 with C or better; CRJ 100 with C or better; CRJ 201 with C or better |
| CRJ | 303 | Statistical Analysis | Fundamentals and application of descriptive and inferential statistics, with emphasis in the administration of justice area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | CS | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; MAT 117, 119, 142, 170, 210 or 270 with C or better |
| CRJ | 305 | Gender, Crime, and Criminal Justice | Studies women as offenders, victims, and professionals in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 306 | Race, Ethnicity, Crime, and Criminal Justice | Studies minority issues in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 308 | Advanced Criminological Theory | Focuses on the definition, measurement, causes, consequences, and control of crime. Explores fundamental debates in criminological thought through original readings in the field. Emphasizes critical assessment of dominant criminological theories. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 with C or better; CRJ 201 with C or better; CRJ 225 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 308 or 394 (Advanced Criminological Theory) |
| CRJ | 315 | Police Organization and Management | Provides a thorough understanding of the structure, processes, and behavior of police organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100, CRJ 301, JUS 100, JUS 105 or JUS 305 with a C or better; CRJ 230 (AJIS 230) with C or better |
| CRJ | 321 | Imperatives of Proof | Problems and means of establishing identity and fact in relation to arrest, detention, adjudication, sentencing, and correctional case management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 350 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 403 | Victims and the Criminal Justice System | Examines criminal victimization in the United States. Topics may include: victimization theories, the nature and extent of victimization, the impact of crime on victims and society, the interactions between victims and the criminal justice system, and victim rights and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 403, 494 (Victimology) or 494 (Victims and the Criminal Justice System) |
| CRJ | 404 | Juvenile Delinquency | Examines the nature of delinquency related to causes, correlations and current strategies being used to reduce its occurrence. Topics may include: policies and programs, juvenile hate crime, social reaction and labeling theories, learning problems and delinquency, gangs, drugs, and capital punishment for juveniles. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 404 or 494 (Juvenile Delinquency) |

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| CRJ | 405 | Neighborhoods and Crime | Draws from the ecology of crime perspective as well as urban sociology to study variation in crime across neighborhoods with emphasis on how social institutions and public policy can influence community crime patterns. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 405 or 494 (Neighborhoods and Crime) |
| CRJ | 406 | Sex Crimes | This course examines the prevalence, nature, and etiology of sex crimes. Crimes examined include sex-related homicide, sexual assault, intrafamilial sexual abuse, sex trafficking, and prostitution. The course also provides a comprehensive overview of the response of the criminal justice system to victims and perpetrators of sex crimes, with a focus on the investigation of sex crime and the prosecution and punishment of sex offenders. Other issues that will be covered are the history and impact of the rape law reform movement, rape trauma syndrome, sex offender treatment strategies, and the history and impact of sex offender notification and registration laws. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing. Credit is allowed for only CRJ 406 or 494 (Sex Offenders and Sex Crimes) |
| CRJ | 408 | Drugs and Crime | Address the problems, practices, programs, and policies associated with drugs, crime, and drug policy. Primarily focuses on the nature, patterns, and trends of drug use, the relationships between drug use and crime, and criminal justice policy targeted at drug use. Also focuses on discussing various research findings and the controversies surrounding the relationship between drugs and crime. Teaches students about theories of drug use and crime, the basic elements of drugs, and the history of drug control and contemporary drug policies. Pays specific attention to the war on drugs and how the role of race was and is intertwined with drugs and crime. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 409 | Police Accountability | Using historical, theoretical and practical approaches, explores major issues in police accountability and community policing including command and control systems, managing police culture, accountability to the community, and training. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 and 201 with C or better (or BAS Appl Sci maj or BIS Criminyg and Crim Justice emph or Criminyg and Crim Justice min with CRJ 201 with C or better); Jr, Sr or Postbacc standing. Credit for only CRJ 409 or 494 (Police Acctably) |
| CRJ | 410 | Procedural Criminal Law | The criminal process. Constitutional and legal problems associated with arrest, search and seizure, and due process of law. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 412 | International Terrorism | Provides a systematic examination of the structural, organizational and political characteristics that affect the topic of international terrorism. Also examines the legal ramifications of the Patriot Act and its legal implications upon our judicial system. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and 201 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 412, 494 (Homeland Security) or 494 (International Terrorism) |
| CRJ | 413 | Forensics | Provides an overview of forensic science as it is practiced in a modern crime laboratory. Examines how the principles of chemistry, biology, physics and other scientific disciplines are applied to the analysis of physical evidence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 413 or 494 (Forensics) |
| CRJ | 417 | Cyber Terrorism | Focuses on the specific avenues of terrorism that are perpetuated in the digital world of the 21st century. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 and 201 with a C or better and Junior or Senior Standing |
| CRJ | 419 | Domestic Terrorism | Develops a foundation and understanding of how domestic terrorism has evolved in the United States of America. Introduces the history of significant events, current events, actors and organizations, and how the future of domestic security issues affects the internal and external politics of the USA. Also examines the problems that have been faced, created, and how other actors react to the United States approach to protect itself and combat Domestic Terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 419 or 494 (Domestic Terrorism) |
| CRJ | 422 | Violence in America | Provides undergraduate students with an understanding of violence in American society. Explores the meanings and measure of violence, as well as theoretical and historical context. Examines multiple dimensions of violence, including domestic, gang-related, terrorism, homicide, hate crimes, school violence and sexual assault. Explores, in addition to theoretical discussion, patterns, prevention, policy and practical implications. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 422 or 494 (Violence in America) |
| CRJ | 443 | Community Corrections | Examines the probation and parole functions as well as the numerous and diverse types of community corrections programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 450 | Crime Analysis | Techniques of crime analysis and crime mapping and how they are practiced in everyday policing. Focuses on issues in crime analysis and crime mapping, critiquing current practices, and reviewing some of the technology that is used. Covers topics such as: introduction to crime analysis and crime mapping; environmental criminology; data and technology; and specific techniques and examples used in tactical, strategic and administrative crime analysis. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 201 with C or better; junior standing |
| CRJ | 461 | Domestic Violence | Legal, historical, theoretical, and treatment aspects of domestic violence, including child abuse, woman battering, incest, and marital rape. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |
| CRJ | 462 | Gangs | Critical examination of the history and development of gangs, including criminal justice system responses to gangs and gang-related behaviors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |

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| CRJ | 463 | White Collar Crime | Overview of major issues in business, professional, and official rule violations. Includes consumer fraud, securities violations, unethical professionalism, and political corruption. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 464 | Organized Crime | The nature of organized crime and its illegal activities, theories of containment, and efforts by justice agencies to counter its dominance in society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 470 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L or SB | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; ENG 101, 105 or 107 with C or better; Junior or Senior standing |
| CRJ | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): CRJ 201 with C or better, CRJ 284 with Y grade if completed |
| CRJ | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | | Pre-requisite: Barrett Honors student; CRJ 100, CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | L | Pre-requisite: Barrett Honors student; CRJ 201 with C or better |
| CRJ | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Pre-requisite: CRJ 201 with C or better; Minimum Junior standing |
| CRJ | 495 | Student Assessment | Students may attend a mid-semester information session on the assessment process. At the end of the semester, students take part in a standardized examination and self-administered survey. Y/E grade only. Students must register for this class their final semester. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 0 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 496 | Directed Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to contribute to a specific project such as a report or publication. Tasks may include data collection and coding, data analysis, literature reviews and producing research reports. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the faculty member with whom the student will work and the director of the school offering the course. | N | RSC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-3 | | Prerequisite(s): CRJ 302 with C or better; junior or senior standing |
| CRJ | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 501 | Seminar in Criminal Justice | Overview of the American criminal justice system, with emphasis on policy issues in police, courts, sentencing, corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 502 | Seminar in Criminology | Theory and research on the nature, causes, and prediction of criminal careers and events. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 503 | Research Methods | Introduces data analysis; overview of research methods used in social science research, including experimental design, survey research, field research, and evaluation research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 504 | Statistical Tools for Criminology and Criminal Justice | Focuses on essential statistical analysis that can be used in criminal justice and related agencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 505 | Theory and Practice in Criminal Justice | Capstone course for the MA in Criminal Justice; provides a synthesis of the criminal justice system. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 510 | Criminal Justice Planning and Program Evaluation | Examines the application of alternative models of strategic planning to the criminal justice system. Covers methods of evaluating criminal justice policies and practices. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 511 | Applied Data Analysis in Criminal Justice | Examines a variety of tools used in the analysis of criminal justice data, including GIS mapping. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 512 | Seminar in Policing | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 513 | Seminar in Courts and Sentencing | Overview of the nature, proposed principles, and theoretical doctrine of the courts and sentencing policies in criminal justice. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 514 | Seminar in Corrections | Theory, research, and policy issues regarding community-based and institutional correction programs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 515 | Seminar in Women and Crime | Introduces students to issues regarding women and the criminal justice system, focusing on their roles as offenders, victims and professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 516 | Seminar in Criminal Justice Organization and Management | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |

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| CRJ | 517 | Seminar on Juvenile Delinquency and Juvenile Justice | Examines patterns and correlates of delinquency within the context of theories of delinquency. Reviews the response of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 518 | Seminar on Race/Ethnicity, Crime, and Justice | Theoretical perspectives and research on the overrepresentation of racial minorities as victims, offenders, and defendants in the criminal justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 519 | Seminar on Victimization | Examines theory and research concerning victimization and consequences for victims, society, and the justice system. Also examines effective responses to victims' post-crime needs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 520 | Seminar on Violent Crime | Examines patterns and correlates of violent crime, as well as prevention strategies and policy implications. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 521 | Seminar on the Nature of Crime | Examines patterns and correlates of crime at individual, situational, and aggregate levels. Topics include defining crime, offender typographies, and criminal careers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 522 | Seminar on Gangs and Crime | Theoretical perspectives and research on gangs and crime, and on the role of the community and the criminal justice system in causes and control. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 524 | Seminar on Punishment and Society | Examines the fundamental philosophical principles of justice and punishment. Includes a comparative and historical perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 525 | Seminar on Life-Course Criminology | Provides an intensive examination of life-course explanations of crime, the life-course perspective and a theoretical orientation, and research methods used in life-course research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 526 | Theories of Crime Causation | | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Criminal Justice MA or Criminology and Criminal Justice MS or PhD major; Credit is allowed for only CRJ 526 or 598 (Theories of Crime Causation) |
| CRJ | 527 | Police Accountability | Examines the great authority of police, the various and most common ways that police abuse that authority, the consequences of those abuses, and accountability mechanisms that can prevent those abuses from occurring. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Justice major; Credit is allowed for only CRJ 527 or 598 (Police Accountability) |
| CRJ | 528 | Prison and Jail Administration | Overview of prison and jail administrative practices, with emphasis on policy and management issues in modern correctional institutions. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminal Justice MA or Criminology and Criminal Justice MS or Criminology and Criminal Science PhD student |
| CRJ | 529 | Community Corrections | Provides a review of theory, research and policy focusing primarily on correctional strategies and programs that take place within the community setting, as well as the function of community corrections within the larger correctional system. Gives particular attention to the purpose and goals of community-based corrections; the historical development of probation and parole practices; and contemporary community corrections programs and strategies such as evidence-based practices, risk assessment, offender reentry, sex offender management, diversion, restitution, community service programs and other emerging alternatives to traditional incarceration. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Science student |
| CRJ | 553 | Terrorism and Weapons of Mass Destruction | Historical evolution of terrorism and weapons of mass destruction. Analyzes current theories and mitigation, preparedness, and response tactics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 554 | Homeland Security | Presents skills necessary to develop policies, strategies, programs, and organizational structure of an all hazards/all risk homeland security program. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only PAF 461 or 554 |
| CRJ | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Criminology and Criminal Justice MS student |
| CRJ | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |

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| CRJ | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 601 | Seminar on Criminological Theory | Examines historical and contemporary criminological theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 602 | Seminar on Criminal Justice Policies and Practices | Analyzes responses to crime and the operation of criminal justice system, with emphasis on theory and research on effectiveness of policies and practices of the system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 603 | Advanced Research Design | Exposes students to advanced topics in research design and methodology in preparation for writing the doctoral dissertation. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 604 | Advanced Statistical Analysis | Use and application of advanced statistical techniques and multivariate analysis of data. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 605 | Topics in Quantitative Methods | Explores advanced techniques of statistical analysis within the field of criminal justice. | N | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 606 | Advanced Topics in Theoretical Criminology | Focuses on criminological theory construction, historical and contemporary theoretical debates within criminology, theory testing, empirical support for theories, and theoretical integration. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 607 | Advanced Topics in Policing | Covers the major issues related to policing and police organizations in the United States. Principal focus on policing and police organizations in large cities, with a focus on police organizational structure, police culture, police organizational environment, police decision making and change in the police organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 608 | Advanced Topics in Courts and Sentencing | Focuses on recent research on charging, plea bargaining, bail decision making, jury decision making and sentencing, as well as the impact of recent reforms directed at the criminal court system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 609 | Advanced Topics in Corrections | Provides a critical examination of the theoretical framework underpinning current correctional policy (institutional and community based), as well as advanced, in-depth analyses of contemporary issues surrounding corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 610 | Advanced Topics in Juvenile Justice | Examines the meaning of the concept of juvenile delinquency as a separate entity in the criminal justice system. Considers the relationship between social attitudes and definitions of youthful law violation, and reviews studies on various forms of delinquency, such as drug offenses, sex delinquency, and status offenders. Also focuses on the internal workings of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 611 | Advanced Topics in Crime and Victimization | Examines research on criminal offending and victimization, focusing on the correlates of offending and victimization, risk and protective factors, and policies designed to reduce the impact of crime on victims. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 612 | Advanced Topics in Race, Gender, and the Criminal Justice System | Examines the interrelationships among race and ethnicity, gender, crime and the criminal justice system. Focuses on theoretical perspectives and empirical research on racial minorities and women as victims, offenders, and criminal justice professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 613 | Qualitative Methods | Provides students with an examination of the design, execution, and write-up of qualitative research. Discusses methods of data collection, including participant-observation, ethnography, and interviewing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 792 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |

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|---------|-------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSE | 180 | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CSE | 100 | Principles of Programming with C++ | Principles of problem solving using C++, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 110 | Principles of Programming with Java | Concepts of problem solving using Java, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 120 | Digital Design Fundamentals | Number systems, conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 180 | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 182 | Applied Problem Solving with C#.Net | Introduces object oriented programming, problem solving, fundamental algorithms and techniques, computer systems concepts, and implementation of programs using Visual C#.Net platform. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 205 | Object-Oriented Programming and Data Structures | Problem solving by programming with an object-oriented programming language. Introduces data structures. Overview of computer science topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | Pre-requisite: CSE 110 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| CSE | 220 | Programming for Computer Engineering | Introduction to C/C++, systems programming, and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 205 with C or better |
| CSE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization. Instruction set architecture. Assembly language. Processor organization and design. Memory organization. IO programming. Exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 100, 110 or 200 with C or better OR Computer Science or Computer Systems Engineering Graduate student; Credit is allowed for only CSE 230 or EEE 230 |
| CSE | 240 | Introduction to Programming Languages | Introduces the procedural (C/C++), applicative (LISP/Scheme), and declarative (Prolog) languages. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): CSE 205 with C or better or Geographic Information Science major with GIS 321 with C or better |
| CSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 301 | Computing Ethics | Ethics for computing majors: history of computing, intellectual property, privacy, ethical frameworks, professional ethical responsibilities, and risks of computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 205 with C or better |
| CSE | 310 | Data Structures and Algorithms | Advanced data structures and algorithms, including stacks, queues, trees (B, B+, AVL), and graphs. Searching for graphs, hashing, external sorting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s) with C or better: CSE 220 or 240; MAT 243 (or 300 for CMS); Computational Math Sci (CMS), Computer Science, Computer Systems Engineering, Digital Culture (Media Proc), Engineering Management, Geo Info Sci or Informatics or BMI/CSE grad |
| CSE | 320 | Design and Synthesis of Digital Hardware | Design and synthesis of digital hardware with hardware description language, computer-aided design tools, and programmable devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better |
| CSE | 325 | Embedded Microprocessor Systems | System-level programming and analysis of embedded microprocessors systems. Fundamental concepts of digital system design for embedded system applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better; Credit is allowed for only CSE 325 or 421 |
| CSE | 340 | Principles of Programming Languages | Formal syntactic and semantic descriptions, compilation and implementation issues, and theoretical foundations for several programming paradigms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 310 with C or better; CSE 230 or EEE 230 with C or better OR CSE Graduate student |
| CSE | 355 | Introduction to Theoretical Computer Science | Introduces formal language theory and automata, Turing machines, decidability/undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS students; CSE 310 with C or better OR CSE Graduate student |
| CSE | 360 | Introduction to Software Engineering | Software life cycle models; project management, team development environments and methodologies; software architectures; quality assurance and standards; legal, ethical issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems BSE or Computer Science BS or Geographic Information Science BS or Engineering Mgmt BSE student or Biomedical Informatics BS; CSE 220 or 240 with C or better, or Computer Science Graduate student |
| CSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 408 | Multimedia Information Systems | Design, use, and applications of multimedia systems. Introduces acquisition, compression, storage, retrieval, and presentation of data from different media such as images, text, voice, and alphanumeric. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 412 | Database Management | Introduces DBMS concepts. Data models and languages. Relational database theory. Database security/integrity and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Biomedical Informatics BS or Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Engineering graduate; Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |

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|---------|-------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSE | 414 | Advanced Database Concepts | Object-oriented data modeling, advanced relational features, JDBC and Web access to databases, XML and databases, object-oriented databases, and object-relational databases. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 412 with C or better |
| CSE | 420 | Computer Architecture I | Computer architecture. Performance versus cost tradeoffs. Instruction set design. Basic processor implementation and pipelining. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 (or CSE 330) with C or better; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 423 | Systems Capstone Project I | Development process: specification, design, implementation, evaluation, and testing with economic, social, and safety considerations. Technical communication and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Prerequisite(s): Computer Systems Engineering BSE student; senior academic level; Prerequisite(s) with C or better: CSE 310, 320, 325 and 360; Credit is allowed for only CSE 423 or 485 |
| CSE | 424 | Systems Capstone Project II | Continuation of capstone project started in CSE 423. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Systems Engineering BSE student; Senior standing; CSE 423 with C or better |
| CSE | 430 | Operating Systems | Operating system structure and services, processor scheduling, concurrent processes, synchronization techniques, memory management, virtual memory, input/output, storage management, and file systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR CSE Graduate student |
| CSE | 432 | Operating System Internals | IPC, exception and interrupt processing, memory and thread management, user-level device drivers, and OS servers in a modern microkernel-based OS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 430 with C or better |
| CSE | 434 | Computer Networks | Network architecture and protocols, principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR Computer Engineering graduate student; Credit is allowed for only ACO 330 or CSE 434 |
| CSE | 438 | Embedded Systems Programming | Development of embedded system software, I/O handlers, and multiple threaded programs. Scheduling algorithms. Embedded software structures. Real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 325 with C or better |
| CSE | 440 | Compiler Construction I | Introduces programming language implementation. Implementation strategies such as compilation, interpretation, and translation. Major compilation phases such as lexical analysis, semantic analysis, optimization, and code generation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 445 | Distributed Software Development | Distributed system architectures and design, service-oriented computing, and frameworks for development of distributed applications and software components. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 360 with C or better OR Computer Engineering graduate student |
| CSE | 446 | Software Integration and Engineering | Software development using architecture design, composition, workflow, services, data resources, data representations, data management, and development tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Systems Engineering BSE or Computer Science BS student; CSE 445 with C or better; Credit is allowed for only CSE 446, 494 (Software Integration and Engineering) or 598 (Software Integration and Engineering) |
| CSE | 450 | Design and Analysis of Algorithms | Design and analysis of computer algorithms using analytical and empirical methods; complexity measures, design methodologies, and survey of important algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 457 | Theory of Formal Languages | Theory of grammar, methods of syntactic analysis and specification, types of artificial languages, relationship between formal languages, and automata. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 459 | Logic for Computing Scientists | Propositional logic, syntax and semantics, proof theory versus model theory, soundness, consistency and completeness, first order logic, logical theories, automated theorem proving, ground resolution, pattern matching unification and resolution, Dijkstras logic, proof obligations, and program proving. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 460 | Software Analysis and Design | Object-oriented and structured analysis and design; software architecture and design patterns; component-based development; software safety and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Systems Engineering BSE or Computer Science BS student; BS Geographic Information Science ; CSE 360 with C or better |
| CSE | 463 | Introduction to Human Computer Interaction | Design, evaluate, and implement interactive software intended for human use. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS, Computer Systems Engineering BSE student; CSE 310 with C or better, OR Informatics BS or Digital Culture (Media Processing) BA student; CPI 310 with C or better |
| CSE | 464 | Software Quality Assurance and Testing | Software quality assurance (SQA), software quality metrics, software configuration management, software verification and validation, reviews, inspections, understanding software testing process, functional testing, structural testing, model-based testing, integration, system, and regression testing techniques, software life cycle models and software testing, testing distributed software, bug management, and use of testing tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: BSE Computer Systems Engineering or BS Computer Science student; CSE 360 with C or better; Credit is allowed for only CSE 464, 494 or 598 (Software Quality Assurance and Testing) |
| CSE | 465 | Information Assurance | Concepts of information assurance (IA); basic IA techniques, policies, risk management, administration, legal and ethics issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Information Systems BS, Computer Systems Engineering BSE, Computer Science BS or Industrial Engineering BSE student; CIS 300 (or CSE 310 or IEE 305) with C or better |
| CSE | 466 | Computer Systems Security | Countermeasures to attacks to computer systems from miscreants (or hackers) and basic topics of cryptography and network security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |
| CSE | 467 | Data and Information Security | Basic concepts of security and privacy, data and database security, access controls, trust models, watermarking, and private information retrieval. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |
| CSE | 468 | Computer Network Security | Practical network security exposure and hands-on experience about basic concepts, case studies, and useful tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Engineering graduate student |

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| CSE | 469 | Computer and Network Forensics | Identification, extraction, documentation, interpretation, and preservation of computer media for evidentiary purposes, file system forensics, and network forensics. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 310 with a C or better OR CSE Graduate student; Credit is allowed for only CSE 469, 494 (Computer and Network Forensics) or 598 (Computer and Network Forensics) |
| CSE | 470 | Computer Graphics | Introduces basic concepts of interactive computer graphics, realistic rendering, and 3-D viewing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS, Geographic Information Science BS, Digital Culture (Media Processing) BA or Computer Systems Engineering BSE student; CSE 310 with C or better; MAT 342 or MAT 343 |
| CSE | 471 | Introduction to Artificial Intelligence | State space search, heuristic search, games, knowledge representation techniques, expert systems, and automated reasoning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE, Computer Science BS or Geographic Information Science BS student; CSE 240 with C or better; CSE 310 with C or better |
| CSE | 472 | Social Media Mining | Network measures, social network analysis, network models, random graphs, small-world model, power laws, data mining, influence and homophily, information diffusion, epidemics, behavioral analysis, recommendation in social media, community detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite with C or better: CSE 310; IEE 380; MAT 343; Computer Science or Computer Systems Engineering major; Credit is allowed for only CSE 472 or 494 (Social Media Mining) |
| CSE | 476 | Introduction to Natural Language Processing | Principles of computational linguistics, formal syntax, and semantics, as applied to the design of software with natural (human) language I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 310 with C or better |
| CSE | 477 | Introduction to Computer-Aided Geometric Design | Introduces basic concepts of 3-D computer geometry, including curves, surfaces, meshes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; MAT 343 (or 342) |
| CSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): junior or senior standing |
| CSE | 485 | Computer Science Capstone Project I | First course in capstone sequence for computer science majors emphasizing development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS major; Senior standing; CSE 310 with C or better; CSE 340 with C or better; CSE 360 with C or better; Credit is allowed for only CSE 423, 461 or 485 |
| CSE | 486 | Computer Science Capstone Project II | Second course in capstone sequence for computer science majors continuing the development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS student; Senior standing; CSE 355 and 485 with C or better |
| CSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Pre-requisite: CSE 310 with C or better |
| CSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-7 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; Minimum cumulative GPA of 2.50 or Graduate Engineering student |
| CSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-3 | | |
| CSE | 509 | Digital Video Processing | Concepts of digital video compression, video analysis, video indexing, browsing and retrieval, video transmission over networks, video processors, MPEG 1, 2, 4, and 7 standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 510 | Database Management System Implementation | Implementation of database systems. Data storage, indexing, querying, and retrieval. Query optimization and execution, concurrency control, and transaction management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 511 | Semi-Structured Data Management | Addresses the data management issues for semi-structured data, which are commonly found in Web applications. Covers techniques on modeling, storing, querying and searching data without schemas, with optional confidence, and/or provenance information. Requires knowledge on relational databases and programming skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 512 | Distributed Database Systems | Distributed database design, query processing, and transaction processing. Distributed database architectures and interoperability. Emerging technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 515 | Multimedia and Web Databases | Data models for multimedia and Web data; query processing and optimization for inexact retrieval; advanced indexing, clustering, and search techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 520 | Computer Architecture II | Computer architecture description languages, computer arithmetic, memory-hierarchy design, parallel, vector, multiprocessors, and input/output. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 522 | Real-Time Embedded Systems | Development of real-time embedded systems, scheduling algorithms, embedded software structures, real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science, Computer Engineering, Master of Engineering or Engineering Science (Software Engineering) Graduate student |

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| CSE | 530 | Embedded Operating System Internals | Investigating Linux source including: memory management, kernel synchronization and driver design topics. Designing, coding, testing, and evaluating embedded operating system software in a Linux environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 531 | Distributed and Multiprocessor Operating Systems | Distributed systems architecture, remote file access, message-based systems, object-based systems, client/server paradigms, distributed algorithms, replication and consistency, and multiprocessor operating systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 534 | Advanced Computer Networks | Advanced network protocols and infrastructure, applications of high-performance networks to distributed systems, high-performance computing and multimedia domains, special features of networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 535 | Mobile Computing | Mobile networking, mobile information access, adaptive applications, energy-aware systems, location-aware computing, mobile security and privacy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 536 | Advanced Operating Systems | Protection and file systems. Communication, processes, synchronization, naming, fault tolerance, security, data replication, and coherence in distributed systems. Real-time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 539 | Applied Cryptography | Uses cryptography for secure protocols over networked systems, including signatures, certificates, timestamps, electrons, digital cash, and other multiparty coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 543 | Information Assurance and Security | Comprehensive understanding of information assurance and security problems with the solutions as well as hands-on experiences about applying these solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 545 | Software Security | Theories and tools for software security, including secure design, threat analysis and modeling, security testing and coding. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 548 | Advanced Computer Network Security | Comprehensive understanding of network security and corresponding solutions, including cryptography, access control, secure Web transactions, e-mail security, and viruses. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 550 | Combinatorial Algorithms and Intractability | Combinatorial algorithms, nondeterministic algorithms, classes P and NP, NP-hard and NP-complete problems, and intractability. Design techniques for fast combinatorial algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 552 | Randomized and Approximation Algorithms | Introduces two important areas of algorithm design for graduate students. A randomized algorithm is allowed to rely on the outcome of a random experiment in deciding on its next step. In many applications, randomized algorithms are simpler than any deterministic algorithms known, but in several cases, they are in fact more powerful or more efficient than any deterministic algorithms. Covers basic paradigms for randomized algorithm design and analysis, as well as for derandomization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 555 | Theory of Computation | Rigorous treatment of regular languages, context-free languages, Turing machines and decidability, reducibility, and other advanced topics in computability theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 556 | Game Theory with Applications to Networks | Strategic conflict as matrix games, notions of equilibrium, definition and existence of Nash equilibrium, zero-sum games, extensive-form games, Bayes Nash equilibrium, potential games, routing games, algorithmic game theory, computation of Nash equilibrium, incentives and pricing in communication networks, application of game theory in wireless networks. Knowledge of calculus, discrete mathematics, probability theory and algorithms is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student; Credit is allowed for only CSE 556 or CSE 591 (Game Theory with Applications to Networks) |
| CSE | 561 | Modeling and Simulation Theory and Application | Modeling theories, simulation protocols, object-oriented modeling, model design, simulation analysis, network-based systems, discrete-event modeling, continuous modeling, hybrid modeling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 563 | Software Requirements and Specification | Examines the definitional stage of software development; analysis of specification representations, formal methods, and techniques emphasizing important application issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 564 | Software Design | Examines software design issues and techniques. Includes a survey of design representations and a comparison of design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 565 | Software Verification, Validation, and Testing | Test planning, requirements-based and code-based testing techniques, tools, reliability models, and statistical testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 566 | Software Project, Process, and Quality Management | Project management, risk management, configuration management, quality management, and simulated project management experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 569 | Fundamentals of Statistical Learning and Pattern Recognition | Concepts of statistical pattern recognition, Bayesian decision theory, parameter estimation, discriminant analysis, basics of artificial neural networks, basics of data clustering. Knowledge of college-level calculus, linear algebra, basic probability theory and proficiency in computer programming is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering or Computer Science Graduate student; Credit is allowed for only CSE 569 or 591 (Statistical Learning and Pattern Recognition) |
| CSE | 570 | Advanced Computer Graphics I | Hidden surface algorithms, lighting models, and shading techniques. User interface design. Animation techniques. Fractals and stochastic models. Raster algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |

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| CSE | 571 | Artificial Intelligence | Definitions of intelligence, computer problem solving, game playing, pattern recognition, theorem proving, and semantic information processing; evolutionary systems; heuristic programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 572 | Data Mining | Advanced data mining techniques: classification, clustering, association, preprocessing, performance evaluation, information assurance, Web mining, security and privacy issues, and other applications. Students must have a solid background in database management systems, search, learning, and statistics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 574 | Planning and Learning Methods in AI | Reasoning about time and action, plan synthesis and execution, improving planning performance, applications to manufacturing intelligent agents. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 575 | Statistical Machine Learning | Spectral clustering, regression, classification, semi-supervised learning, feature reduction, manifold learning, ranking, kernel learning and multitask learning. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering MCS, MS, or PHD major; Credit is allowed for only CSE 575 or 591 (Machine Learning) |
| CSE | 576 | Topics in Natural Language Processing | Comparative parsing strategies, scoping and reference problems, nonfirst-order logical semantic representations, and discourse structure. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 577 | Advanced Geometric Modeling I | Advanced concepts of geometric modeling: rectangular and triangular surfaces, triangle meshes, Voronoi diagrams, discrete and continuous shape measures, volumes and volume visualization. Students must have a solid background in linear algebra, calculus, and basic 3D graphics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 579 | Knowledge Representation and Reasoning | Covers knowledge representation and reasoning algorithms in artificial intelligence, shows how they can be used in practice, and provides an overview of current research trends. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering Graduate student; Credit is allowed for only CSE 579 or 591 (Knowledge, Represent/Reasoning) |
| CSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSM | 201 | Introduction to Community Sports | Examines the role of community sports at the local, national and international levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CSM 201 or PRM 201 |
| CSM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CSM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| CSM | 305 | Sports Facility Operations and Management | Overview of the management and operations of sports facilities. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Community Sports Management major; CRD 210 (or NLM/PRM/TDM 210) with C or better; MAT 142 or higher; minimum 2.50 cumulative GPA; minimum 45 hours |
| CSM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| CSM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| CSM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| CSM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| CSM | 407 | Ethics and Legal Issues in Sports | Comprehensive look at ethical decision making from many perspectives in the sports environment. Presents legal issues as they relate to history, present society and future trends. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: CSM 201 |
| CSM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| CSM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |
| CSM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |
| CST | 100 | Object-Oriented Software Development | Introduces problem solving with a state-of-the-art programming language. Expressions, statements, basic control flow and methods. Data, data aggregation and usage. Uses a structured personal software development process to implement solutions representative of common computing applications. Uses development kits for some course activities. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| CST | 111 | Introduction to Game Development | Introduces fundamental video game development concepts and techniques prevalent in video game industry. Provides opportunity to understand these techniques and learn how they are applied during the production of a video game. Includes game design, game production, asset production, game programming, game art and animation. Hands-on experience by writing 2D game prototypes while learning different game mechanics and features. Intended to serve as an introduction into the game production cycle, breaking down the complex process of game creation into a simple step-by-step program. No programming knowledge is required; however, some degree of computer proficiency is desirable. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Credit is allowed for only CST 111 or 194 (Intro to Game Development) |
| CST | 150 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Pre-requisite: CST 100, EGR 101 or SER 101 (or be co-enrolled in CST 100); MAT 117 or higher; Credit is allowed for only CST 150 or SER 232 |

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| CST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| CST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 200 | Core Data Structures with Object Oriented Programming | Design, implementation and use of core data structures; object-oriented software development: design, analysis and programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100 (or 211) with C or better; Credit is allowed for only ACO 102, CSE 205 or CST 200 |
| CST | 201 | Object-Oriented Software Development II Lab | Hands-on development and programming using objects, inheritance, and polymorphism; GUI programming; introduction to software engineering concepts; UML tools. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre/Co-requisite: CST 200 |
| CST | 211 | Intermediate Game Development | Introduces multiplayer games, artificial intelligence, and tile-based worlds using a scripted programming environment. Uses game scripting to automate, repeat, change, anticipate, and govern the action of games from a simple word game to a complicated multiplayer game like pool. Introduces gaming terminology and basic genres, enhancements such as fine-tuning graphics, creating optimal soundtracks, and using high score lists, as well as creating and modifying online chat files. Introduces video game scripting to the student. Scripting skills are essential in every aspect of game development and are used by designers, programmers, and artists in the game industry. Students learn the core scripting skills required to implement game features and apply those to enhance the prototype created in the introductory course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 111; Credit is allowed for only CST 211 or 294 (Intermediate Game Development) |
| CST | 220 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| CST | 230 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |
| CST | 250 | Microcomputer Architecture and Programming | Microcomputer architecture, instruction set, assembly language programming and debugging, I/O considerations, memory interface, peripherals and busses, exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100; CST 150 or SER 232 |
| CST | 251 | Microcomputer Architecture and Programming Laboratory | Hands-on experience in assembly language programming and debugging. May be taken concurrently with, or subsequent to, CST 250. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: EGR 101 (or CST 100), or CST 150; Pre/Co-requisite: CST 250 |
| CST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 315 | Software Enterprise I: Tools and Process | Introduces tools and techniques used in software enterprise/development, including coding, design, testing, configuration management, and personal process management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 230 or SER 222 |
| CST | 316 | Software Enterprise II: Construction and Transition | Best practices in software construction in the context of a team project, including refactoring, defensive programming, unit testing, and configuration and release management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 315 |
| CST | 335 | Applications of Computer Theory | Introduces and applies formal language theory and automata, Turing machines, decidability, undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 230; MAT 243 |
| CST | 350 | Digital Design with Hardware Description Languages | Digital system design using Verilog. Structural and behavioral modeling. Design examples include finite-state machines, RISC CPUs, and UARTs. Requires design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 4 | | Prerequisite(s): CST 150 or SER 232 or Fulton Polytechnic School graduate student |
| CST | 386 | Operating Systems Principles | Fundamentals of operating systems, process management, scheduling and synchronization techniques, memory and file management, protection and security issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 222) and CST 250 (or CST 251) |
| CST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 415 | Software Enterprise III: Inception and Elaboration | Third course in the four-course enterprise sequence. Students perform inception (project launch) and elaboration (requirements analysis) activities in project teams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | L | Pre-requisite: CST 316; ENG 101, ENG 105 or 107 |
| CST | 416 | Software Enterprise IV: Project and Process Management | Project-centric course focusing on applying software process, project management, and technical leadership. Final course in the software enterprise sequence. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 415; ENG 102, 105, 108 or 112 |
| CST | 420 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| CST | 425 | Server Software Programming | Design and implementation of software servers, threaded socket servers, servers for distributed Web-based applications; security for the Web. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |

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| CST | 427 | Distributed Object Systems | Distributed applications with Web services, NET, RMI, CORBA; concepts and frameworks for managing registering, locating, and securing distributed object applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 428 | Web-Client User Interface Programming | Client-server model for window interfaces. Java Swing, Applets, mark-up and scripting languages; Web tools and related technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 433 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management), or Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| CST | 441 | Software Development for Mobile Devices | Mobile computing using Java's K, Virtual Machine, MIDP for wireless applications; user interfaces, persistent data storage, and networking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 450 | Computer Architecture | Price/performance analysis, instruction set design, RISC/CISC, processor design and implementation, pipelining, instruction-level parallelism, memory hierarchy, storage and I/O systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250 |
| CST | 452 | Digital Systems Synthesis with Hardware Description Languages | Uses a hardware description language to synthesize components of computers and digital systems as FPGAs. Emphasizes optimization and satisfying performance constraints of system scale designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 350 |
| CST | 456 | Embedded Interfaces: Sensors and Actuators | Electromechanical sensors and electrical actuators, analog-to-digital and digital-to-analog conversion, hardware and software interfaces for embedded systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 150 (or SER 232) and CST 200 |
| CST | 458 | Digital Computer Networks | Network hardware and software, topologies, protocols, OSI model, LANs, WANs, Internet; basic concepts of packet switching, routing, error controlling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250; CST 251 or IFT 201 or BAS student |
| CST | 460 | Computer Graphics with Applications | Hands-on course introduces 2D and 3D computer graphics programming and some of the applications related to the topic in a studio-style learning environment. Uses data structures for computer graphics, and a graphics API such as OpenGL taught with industry examples. Intended for upper-division (senior) students in CST programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 100 (or EGR 102); CST 230 (or SER 221) |
| CST | 483 | Cyber Security Capstone Project | Applies security techniques to a real-world situation. Development of security policy, risk solutions, and incident response facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 2 | | Pre-requisite: BAS student; CST 481 or CST 489; Pre/Co-requisite: CST 482 |
| CST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| CST | 486 | Embedded C Programming | Programming concepts for embedded systems. Interfacing and controlling LED, LCD, keypads, buttons. Embedded OS concepts. Timers and interrupts. Serial communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): undergraduate or nondegree Engineering student, CST 350 and 383 with C or better OR SER 222 with C or better; minimum 2.25 GPA OR graduate Engineering student |
| CST | 490 | Reading and Conference | | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 496 | Ethics and Professionalism in Computing | Studies major social and ethical issues in computing, including impact of computing on society, ethical behavior, and social responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: Junior or Senior standing |
| CST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| DAH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DAH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DAH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DAH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DAH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DAH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DBA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 701 | Macroeconomic Policies in a Global Environment | Provides the framework for policy makers when facing macroeconomic situations, the tools in analyzing the costs and benefits of alternative policy options, and the knowledge necessary for making recommendations to policy makers and business leaders. Students learn knowledge and skills about global economy and risks that help facilitate dissertation research. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 702 | Global Financial Systems: Markets and Institutions | Examines the overall architecture of the global financial system, its major components, and their functions in the macro economy. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 703 | Global Financial Systems- Institutional Investing | A large fraction of investors around the world invest in securities markets indirectly, viz. through mutual funds or separate accounts established with investment managers, whether they be endowments, foundations, pension plans or sovereign funds. Exposes students to the global marketplace for such portfolios. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 704 | Design of Knowledge Base Organizations for Performance and Innovation | Covers various issues on executive compensation and management pay structure with a particular emphasis on aligning business strategy, organization design to the choice of performance standards and pay structure for managers. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 705 | Global Corporate Strategy | Demonstrates that decisions affecting the international expansion of a firm are neither obvious nor totally determined by the technological or economic forces generally associated with globalization. Addresses the most transcendental decisions that multinational firms face in the course of conducting business across borders. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 706 | Strategic Visioning, Leadership and Change Management | Addresses the interrelationship among organizational culture, leadership, and the management of change in order to promote continuous improvement of the organization's market position. Addresses the role of strategy, how strategy explicates vision, and how effective strategies are created. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 707 | Risk Management : An Enterprise Perspective | Provides an understanding of the broad set of risks an enterprise faces; their origin, characteristics and potential impact on business; and how they can be efficiently managed at the enterprise level. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 708 | Challenges of Corporate Finance and Governance | Helps students understand the link between finance and corporate strategies, as well as examine ways to establish and reform the practices of corporate governance in China. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 709 | Finance and Law | Helps students learn about the philosophy of law, various legal systems, the relationships among law and economics and finance, the practice of law in a global context. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 710 | Financial Decision Making | Provides a framework of conceptual knowledge and enables students to understand what the literature on financial theory is trying to do and how it all fits together. Also provides an in-depth experience with the subject of finance and equips students for their future development as a practicing executive. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 711 | Finacial Innovations | Focuses on how financial innovations influence the evolution of finance. Discusses many of the major financial innovations in recent history, the forces driving these innovations, their impact on the financial system and the real economy and the risks they bring. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 712 | Advanced Topics in Global Economy and Finance: Domestic Module | Addresses many critical topics facing China today on its quest of globalization, the need for transforming its economic structure, capital markets and corporate control, and its monetary policies. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |

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| DBA | 713 | Advanced Topics in Strategy and Management: Domestic | Reexamines many popular best practices through panel discussion and speaker series on why some of those practices failed to work in China, and how firms have creatively modified their strategic undertakings to fit its environment. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 714 | Current Trends in Global Economy, Finance and Management: US Module | Provides first-hand experiences on the world class practices by the multinationals and interactions with the leading experts on the emerging topics of interest on globalization, financial regulations, and managerial innovations. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 715 | Current Trends in Global Economy, Finance and Management: Europe Module | Provides direct exposure to European markets, firms, and institutions, their history, current status, and future directions. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 721 | Research Seminar I- Research in Action | Provides needed skills for research and thesis work. 1. Focuses mainly on research design and fundamental statistical/survey and field study methods. The key objective is to provide students with the needed required skills and concepts of the scientific method, the philosophy of science, and research design with an emphasis to solve specific problems. This course is spread out during the first year of the program. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 722 | Research Seminar II-Research in Action II | Focuses on the process of research "in actions" through faculty presentation and research workshops. Faculty with diverse research interest and methodologies present up-to-date research works. Through interaction, students gain first-hand experience on learning the process of how faculty, with diverse research interests, are able to identify specific research topic, choosing the right research methodology to address their research questions. The presentation and research workshop are scheduled at the beginning of the second year and throughout the entire year, allowing the program to leverage faculty availability during their course delivery while enabling students to seek out their faculty mentors for future dissertation engagement. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 723 | Research Seminar III- Research in Action III | Provides students with opportunities to present their own research proposal/ thesis ideas while allowing the participating faculty and fellow students to offer constructive comments. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 100 | Introduction to Dance | Overview of dance as a cultural and performative practice, exploring history and theory, philosophy, and movement practices, with reference to key pioneers in the field from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 110 | Argentine Tango I | Introduces basic movement elements, explores various contexts shaping Argentine Tango, and emphasizes social tango with exposure to vals and milonga timing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 111 | Raq Sharqi I | Familiarize students with the ancient art of Middle Eastern dance. Covers posture, styling, basic body isolations, rhythm patterns, footwork, as well as the social significance and history of the dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 112 | Capoeira I | Introduces the Afro-Brazilian martial art and movement form capoeira. Molds elements of self-defense, dance, music, song, language, culture and philosophy into the course. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |

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| DCE | 113 | Dances of Africa I | Introduces basic elements of West and Central African dance styles, including the traditional rhythms and cultural context. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 114 | Dances of India I | Introduces Indian folk dances with an emphasis on the history and various movement elements of an ancient South Indian classical dance form, known as Bharata Natyam. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 115 | Yoga I | Introduces a basic physical and philosophical understanding of yoga. Designed by a certified Yoga instructor. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 115 or 194 (Yoga I) |
| DCE | 116 | T'ai Chi Chuan I | Introduces an ancient Chinese internal martial art form. The structure includes the beginner level of Tai Chi Chuan theory and movement practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 117 | Feldenkrais I | The Feldenkrais method is an approach to enhance awareness of the body, improve functional actions, and expand one's repertoire of movements. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 118 | Yoga/Pilates | Provides a basic physical and philosophical understanding of yoga and Pilates mat practices. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 120 | Modern Dance I | Introduces modern dance and its basic principles, including alignment, core muscular strength, and spatial exploration. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 121 | Ballet I | Introduces principles of ballet and development of basic technical skills, including dynamic alignment, functional rotation, and musicality. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 122 | Jazz I | Provides students with beginning-level technique class in different jazz styles. Focuses on alignment, technique, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 123 | Hip Hop I | Equips student with understanding of hip hop dance history, culture and music through studio work on various hip-hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 124 | Latin/Swing/Ballroom I | Introduces major Latin and ballroom dances and focuses on a system of elements that are found in all partnership dances, including movement components, rhythmic patterns, dance positions, and unique characteristics used to better define each dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 125 | Latin/Salsa I | Introduces Latin dancing. Instruction focuses on salsa, cha-cha, merenque, and rumba. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 126 | Country-Western | Initiates the student into the rhythm two-step, progressive two-step, night club two-step, country cha-cha, country waltz, triple swing and a multitude of line dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 130 | First-Year Movement Practices I | Introduces diverse somatic movement principles and practices through exploration of movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major |
| DCE | 131 | First-Year Movement Practices II | Modular structure enables a series of short intensive studies including movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance student; DCE 130 with C or better |
| DCE | 133 | Urban Movement Practices I | Designed as an introduction to dance, history, culture, and music in urban movement styles. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, BA Performance and Movement, BIS-Dance, Dance minor; Credit is allowed for only DCE 133, 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) |
| DCE | 134 | Postmodern Contemporary I | Introduces postmodern contemporary dance technique and theory. Designed to enhance the dancer's technical and artistic proficiency by using movement that is athletically challenging, nuanced, and rhythmically complex. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 135 | Contemporary Ballet I | Introduces contemporary view of ballet technique and theory with attention to enhancing student's dynamic alignment. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 136 | Somatic Practices I | Survey course offers a practical and theoretical introduction to some of the major somatic practices evolving out of the 20th century. Guest practitioners and teachers of various embodied practices share theory, practice and context. Explores movement and the integration of the body and mind through a variety of somatic lenses (e.g., the Alexander Technique, Authentic Movement, and experiential anatomy). | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 136 or 194 (Intro Movement Language Sources) |
| DCE | 137 | African and Diaspora Movement Practices I | Foundational course in the African and the Diaspora movement practices curriculum. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA, BIS-Dance concentration or Dance minor; Credit is allowed for only DCE 137, 194 (Mvt Practice: Africa/Diaspora), 294 (Mvt Practice: Africa/Diaspora) or 494 (African & Diaspora Mvt Prac) |
| DCE | 160 | First-Year Creative Practices I | Explores creativity and creative processes with reference to some key historical practices and influential artists. Seeks to encourage and develop students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 161 | First-Year Creative Practices II | Explores creativity and creative processes with reference to some key historical practices and influential artists. Encourage and develops students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 160 with C or better |
| DCE | 170 | First-Year Seminar I | Orientation to the university learning environment and profession of dance with emphasis on developing tools and processes for reflection and critical thinking. | N | LEC | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DCE | 171 | First-Year Seminar II | Continuation of First-Year Seminar I. Focuses on orientation to the larger field of contemporary dance practice with an emphasis on developing tools and processes for reflection, synthesis, and critical thinking. Requires participation in School of Dance "Dance Matters." | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance majors |
| DCE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 201 | Dance, Culture, and Global Contexts | Introduces the study of dance as culture in diverse global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 202 | Dance in U.S. Popular Culture | Investigates vital cultural heritages that have shaped dance in U.S. American popular culture from 20th century to the present. Emphasizes dance as a producer of social space and cultural identity as well as a reflection of diverse social realities and dynamics of power. Following required reading and videos, the course surveys time periods of dance from the late 1800s through the 20th century to the present day. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Credit is allowed for only DCE 202 or 294 (Dance in US Popular Culture) |
| DCE | 203 | Walk this Way | Addresses walking as a key component in movement studies and further brings the study of bodily movements center stage as a means to address the dynamic between self and society. Designed for nonmajors. Not eligible for majors credit. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only DCE 203 or 294 (Walk this Way) |
| DCE | 210 | Argentine Tango II | Builds upon concepts, figures, and elements of the Argentine Tango introduced in level one. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 110 or DAN/DCE 194 (Argentine Tango I) |
| DCE | 211 | Raqs Sharqi II | Focuses on refining beginning technique, advanced movements, layering and musical interpretation. Uses choreography and improvisation to encourage mind-body awareness. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 111 or DAN 194 (Raqs Sharqi I) |
| DCE | 216 | T'ai Chi Ch'uan II | Intermediate-level study of the ancient Chinese martial art of rounded, fluid, balanced movements. Teaches the sets of long form Yang style of Tai Chi Ch'uan in a slow and relaxed manner. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 116 or DAN 194 (T'ai Chi Ch'uan I) |
| DCE | 220 | Modern Dance II | Explores modern dance practices, including somatic techniques, stylistic versatility, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DAN 130 (Modern I) or DCE 220 |
| DCE | 221 | Ballet II | Explores contemporary and classical ballet practices, focusing on whole body integration and performance strategies. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 222 | Jazz II | Explores intermediate level of jazz dance techniques. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 122 or DAN 130 (Jazz I) |
| DCE | 223 | Hip Hop II | Intermediate-level class that provides the knowledge of hip hop dance history, culture and music through studio work on various hip hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 123 or DAN 194 (Hip Hop I) |
| DCE | 224 | Latin/Swing/Ballroom II | Continues development of level one Latin/Swing/Ballroom dances to prepare student to have command of the complex rhythmic patterns and figures used in major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 124 or DAN 194 (Latin/Swing/Ballroom I) |
| DCE | 225 | Latin/Salsa II | Reviews and reinforces the basics introduced in Latin/Salsa I and builds upon more complicated concepts and figures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 125 or DAN 194 (Latin/Salsa I) |
| DCE | 230 | Second-Year Movement Practices I | Investigates selected movement forms in the second-year movement practices. New movement forms include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwondo, aikido, wushu, LMA, yoga, or somatic bodywork. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 131 with C or better |
| DCE | 231 | Second-Year Movement Practices II | This course is set up in two modules. In module one, students will investigate a movement form, include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwondo, aikido, wushu, LMA, yoga, or somatic bodywork. Module two expands the practice of rhythmic awareness through exploration and investigation of the close relation between thought and act, the kinesthetic and the verbal, the text and the beat, as well as the breath and the word. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 230 with C or better |
| DCE | 233 | Urban Movement Practices II | A practical and theoretical investigation of the urban movement forms and practices developed over recent years in urban centers around the world. Addresses the evolution of hip hop/urban movement dance through the study of House style. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, Performance and Movement major, BIS-Dance Concentration or Dance minor, DCE 123 or 133 or 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) with C or better |
| DCE | 234 | Postmodern Contemporary II | Investigation and practices of postmodern contemporary dance technique. Development of movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 235 | Contemporary Ballet II | Explores the possibilities of contemporary ballet technique and theory with awareness of student's individual anatomical differences. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |

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|---------|-------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-----------------------------------|-------|-----------------|---------------------------------------------------------------|
| DCE | 236 | Somatic Practices II | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 240 | Media for Dance | Computer applications for human movement modeling, digital video design and creation, sound composition, and the incorporation of multimedia design elements into online environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | |
| DCE | 260 | Second-Year Creative Practices I | Explores concepts introduced in the first year of creative practice and further expands into the themes of analysis and investigation. Year two experience involves the investigation of learning to compose and construct choreographic material through individual, collaborative, improvisational, and group exploration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 161 with C or better |
| DCE | 261 | Second-Year Creative Practices II | Continues developing students' awareness of their own creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 260 with C or better |
| DCE | 262 | Rhythmic Theory for Dance I | Elements of music, music structures, and their relationship to dance. Emphasis on rhythmic analysis and dance accompaniment. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 270 | Second-Year Seminar I | Continues developing tools and processes for reflection and critical thinking by identifying individual goals and objectives related to the students' current and future academic and professional careers | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 171 |
| DCE | 271 | Second-Year Seminar II | Provides basic understanding of costume design, sound production, and interactive performance for dance. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 270 with a Y |
| DCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 300 | Moving Histories | In-depth study of the history of Western dance in Europe and America. Students learn about various ways of conducting research into dance history, including interviewing, researching using primary resources and performing scholarship. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 101, 105 or 107 with C or better |
| DCE | 301 | Meaning in Motion | Critical inquiry into the nature of dance through the lens of dance theory. Covers philosophical and theoretical issues raised by the study of dance in relation to specific historical and global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better |
| DCE | 303 | The Body Condition(ed) | Examines contemporary practices of conditioning the body from a triangulation of perspectives: physical, social, and experiential. Enhances the ability to obtain a holistic understanding of how the self/social dynamic operates within the context of body conditioning. Designed for Non-Majors. Not Eligible for Dance Major Requirements. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | SB | Pre/Co-requisite: ENG 102, ENG 105 or ENG 108 |
| DCE | 324 | Latin/Swing/Ballroom III | Refines dances learned in the intermediate level of Latin and ballroom dances, including foxtrot, waltz, salsa, cha cha, rumba, samba, west coast swing, bolero, tango, and swing. Prepares students to have a more advanced command of the complex rhythms and figures used in the major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 224 or DAN 294 (Latin/Swing/Ballroom II) |
| DCE | 330 | Third-Year Movement Practices I | Focuses on the application of diverse movement forms and somatic studies in a range of performance contexts. These contexts may include live and mediated performance, community-based projects, pedagogy, analysis of movement forms in relation to musical compositions or the creation of new movement languages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major; DCE 231 |
| DCE | 331 | Third-Year Movement Practices II | Student will focus on the integration of diverse movement forms and somatic practices, as well as developing an in-depth understanding of a range of performance contexts practically and theoretically. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 330 with C or better |
| DCE | 333 | Urban Movement Practices III | A practical and theoretical integration of the urban movement forms that have been investigated and practiced in the urban movement practices curriculum. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: DCE 233 with C or better |
| DCE | 334 | Postmodern Contemporary III | Integrates dance theory and practices of postmodern contemporary dance technique. Refines movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 335 | Contemporary Ballet III | Expansion of student's technical skills and theoretical knowledge through utilization of a hybridized ballet movement vocabulary. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DCE | 336 | Somatic Practices III | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): minimum 45 hours |
| DCE | 350 | Dance in the Classroom: Learning Through Movement | Explores theories of learning, thought development, and knowledge construction through aesthetic movement experiences. Students look to theories from the fields of aesthetics, phenomenology (study of lived experiences), somatics (study of the soma or body/mind), sociology and epistemology (theory of knowledge) to understand how the intertwined relationship of human thought development and movement patterning can affect children's learning and development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Junior standing |
| DCE | 354 | Creative Approaches to Teaching Dance I | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student |
| DCE | 356 | Creative Approaches to Teaching Dance II | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major |
| DCE | 360 | Third-Year Creative Practices I | Provides an orientation to the field of community dance practice. Students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 261 with C or better |
| DCE | 361 | Third-Year Creative Practices II | Historical survey of music and compositional elements relative to dance. Emphasis on analysis of choreography from a musical standpoint. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 360 with C or better |
| DCE | 370 | Third-Year Seminar I | Provides an orientation to the field of community dance practice. Over two consecutive semesters, students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 271 with a Y |
| DCE | 371 | Third-Year Seminar II | Hones skills in collaborative approaches, teaching, leading, and facilitation through partnerships with community organizations in the Phoenix metropolitan area. Students study community dance practices covering a range of creative process and community building tools that can be used in diverse settings. Applies research methods, such as data collection, analysis, and reflection, to measure the efficacy of community arts practices. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 370 with a Y. |
| DCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 402 | Ethnography of Dance Practices | Examines the field of ethnochoreology, ethnographic methods, and interpretive research practices. Develops critical writing, thinking, and viewing skills for comparative dance study. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | (L or HU) & G | Pre-requisite: DCE 201 with C or better; ENG 102, 105, or ENG 108 with C or better |
| DCE | 404 | Dance and Ethics | Examines ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Junior standing; ENG 102, ENG 105 or ENG 108 with C or better |
| DCE | 405 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): Junior standing; Dance BFA major or nonmajor with DCE 303 (or DCE 394 The Body Conditioned) with C or better. Credit is allowed for only DAN 494 (Rhetorical Moves) or DCE 405 |
| DCE | 438 | Dance Theatre Performance/Production | Performance or technical theatre work in designated dance productions. 3 hours a week per semester hour. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance BFA, Dance minor or BIS Dance concentration |
| DCE | 460 | Transition Project I | Original choreography for group performance with analysis and critique of problems encountered in production. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DCE | 461 | Transition Project II | Original research that integrates dance and a related field of interest. Includes production of written document and public presentation. Fall semester must be completed before spring registration. May be repeated for a total of 4 semester hours. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance students; DCE 460 with C or better |
| DCE | 470 | Fourth-Year Seminar | Explores and investigates the larger world of dance as it pertains to transitioning out of the university environment into professional lives. Discussion revolves around career opportunities, options and finding potential work synergies that will parlay into meaningful and exciting lives. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: BFA Dance major; DCE 371; Credit is allowed for only DCE 470 or 494 (4th-Yr Seminar) |
| DCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| DCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | L | |
| DCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 501 | Philosophy of Dance | Analyzes traditional and contemporary theories of dance with regard to issues of expression, form, and meaning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 502 | Cultural Concepts of Dance | Examines the close connections among culture, dance, and movement through writings in cultural theory, dance ethnology, and philosophy. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 504 | Dance and Ethics | Examination of ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 505 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts graduate students |
| DCE | 530 | Graduate Movement Practices I | The four-semester sequence of graduate movement practices are a sequence of graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Addresses the integrated practices and theoretical underpinnings of Laban/Bartenieff praxis, Body Mind Centering and other somatic practices that are explored within the four-course sequence that facilitate movement exploration, movement functioning, movement performance and movement creation as well as performance and social theory constructs. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 531 | Graduate Movement Practices 2 | The series of graduate movement practices courses are a sequence of two graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Classroom experiences are approached from theoretically grounded and contextualized perspectives that address through practice current somatic and epistemological thinking. The overarching frameworks for the first and fourth modules are designed as "bookends" for introducing, contextualizing, and synthesizing classroom experiences and concepts explored within the two-course sequence. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DCE | 534 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for first-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 535 | Contemporary Ballet | Graduate-level theoretical study and movement practice of contemporary ballet for contemporary dancers. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 536 | Somatic Practices | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. Integrated lecture/lab. Prerequisite(s): degree- or nondegree-seeking graduate. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only DCE 536 or DCE 598 (Movement Language Sources) or (Somatic Practices) |
| DCE | 537 | African and Diaspora Movement Practices | Investigates and integrates historical and cultural contexts for West, Central, and South African and Post-African (diasporic) movement practices. Engages movement and physical articulation as tools to examine specific dance cultural knowledge and demonstrate/embody techniques representing that cultural knowledge. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance major; Credit is allowed for only DCE 537 or DCE 598 (African Diaspora Movement Practices) |
| DCE | 538 | Dance Theatre | Performance in specially choreographed dance productions. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 540 | Issues in Media for Dance | Introduces desktop multimedia as it relates to dance creation, production, education, and research. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 543 | Sound Design for Dance | Audio mixing for analog/digital recording and editing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors |
| DCE | 554 | Graduate Dance Pedagogy | Provides both the theoretical basis and practical application of principles for teaching contemporary dance disciplines in a postsecondary setting. Includes discussion, co-teaching and individual teaching projects and sessions, practical application of course readings, and guest speakers. Both dance and discussion of ideas in each class session. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 560 | Graduate Creative Practices I | Artistic research through the practices of improvisation, choreographic choice making, and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 561 | Graduate Creative Practices II | Explores a variety of contemplative practices designed to cultivate awareness and serve as stimuli for generating choreography and creative approaches in interdisciplinary collaborations. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student; DCE 560 |
| DCE | 563 | Rhythmic Awareness | This course focuses on the kinesthetic aspects of weight, space, and time. It is opportunity for individual exploration as well as an ensemble experience, a chance to come together as a group through the communicative nature of sound, movement, and visual patterns. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 570 | Graduate First-Year Seminar I | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. Seminar. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance Graduate student; Credit is allowed for only DCE 570 or DCE 591 (1st Year Graduate Seminar) |
| DCE | 571 | Graduate First-Yr Seminar II | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices; present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 634 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for second-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 660 | Graduate Creative Practices III | Artistic research through the practices of choreographic choice making, exploration, and experimentation of integrated environments and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 661 | Graduate Creative Practices IV | Culmination of a four-semester Creative Practices sequence, focusing on articulating individual creative practices and identifying the needs of each student relative to their Applied Projects. Students are also responsible for understanding the content and requirements for the selected modules of this course. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 670 | Graduate Second-Year Seminar I | Part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, presents opportunities for dialoguing about topics significant to fulfilling degree requirements and promotes success in the dance program as well as to facilitate transition into the professional world. Reflection is a key component of the School of Dance curriculum; develops ability and skills in analysis, but more importantly builds awareness of intuitive and habitual patterns of response to new stimuli. The Seminar is a key moment each week to develop a community of inquiry amongst peers. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student; Credit is allowed for only DCE 591 (2nd Yr Seminar) or DCE 670 |
| DCE | 671 | Graduate Second-Year Seminar II | The Second-Year Graduate Seminar is part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| DCI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| DCI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| DCI | 510 | Teacher as Researcher | Introduces teacher research as a new research genre; offers teachers guidance on planning and conducting research on their practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: COE 501or DCI 510 with B or better |
| DCI | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 701 | Curriculum Theory and Practice | Curriculum theory and practice as a field of study. Its current orientations and applications, modes of inquiry, and community of scholars and practitioners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 702 | Interdisciplinary Research Seminar | Core research course for students in the interdisciplinary PhD in Curriculum and Instruction program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |

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| DCI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DNP | 601 | Theoretical Foundations for Advance Practice Nursing | Examines philosophical foundations of advanced nursing practice by analyzing interrelationships among theory, philosophy, practice, and research. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 602 | Evaluating Research for Practice | Provides opportunities for graduate students to develop the knowledge and skills to critically analyze scientific literature and research for application to practice. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 604 | Advanced Human Pathophysiology Across Lifespan | Core course focuses on human pathophysiology and concepts of genetics for advance practice nursing. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: DNP Advanced Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 605 | Advanced Health Assessment Across Lifespan | Advanced health assessment skills, including history-taking strategies and physical, functional, developmental, and psychosocial assessment. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 606 | Advanced Neonatal Health Assessment | Students develop advanced assessment skills related to the neonate/infant, including history taking. Includes physical, developmental, behavioral, cultural and genetic assessment. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP 659; DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) major; Co-requisite: DNP 651 |
| DNP | 608 | Advanced Pharmacotherapeutics Across Lifespan | For advanced practice nurses, expands theoretical and evidence-based knowledge and promotes synthesis of pharmacotherapeutic concepts and principles across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 609 | Advanced Practice Nursing Role I | Focuses on the historical and contemporary social and political influences on the role of the DNP-prepared advanced practice nurse. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: Doctor of Nursing Practice major |
| DNP | 610 | Advanced Practice Nursing Role II | Focuses on the ethical and professional role of the DNP, negotiation strategies, and preparation of a professional portfolio. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP 609 with B or better |
| DNP | 613 | Women's Health Promotion I | Didactic course focuses on theories of health behavior, health promotion, disease prevention and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 614 |
| DNP | 614 | Women's Health Practicum I | Clinical assessment and education of women across the lifespan for the purposes of health promotion and disease prevention. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 613 |
| DNP | 615 | Management of Common Problems in Women's Health | Focuses on management of nursing care for high-risk perinatal women and women with common health problems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 616 |
| DNP | 616 | Advanced Women's Health Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 615 |
| DNP | 617 | Management of Complex and Chronic Disease in Women | Didactic course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health status across the lifespan and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 618 |
| DNP | 618 | Advanced Women's Health Practicum III | Clinical course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health states across the lifespan and patient education. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 617 |
| DNP | 621 | Health Assessment Skills | Skill-based course focuses on advanced clinical skills including suturing, splinting, x-ray, ECG and advanced lab interpretation. | N | LEL | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): DNP 605 |
| DNP | 623 | Adult-Gerontology Health Promotion | Introduces health promotion and disease prevention for adults across the lifespan emphasizing principles of evidence-based practice in clinical and community settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 624 |
| DNP | 624 | Adult-Gerontology Health Promotion Practicum | Clinical practicum designed to apply principles of evidence-based practice in health promotion and disease prevention in clinical and community settings. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 623 |
| DNP | 625 | Management of Common Health Problems in Adults Across the Lifespan | Includes theory and research that guides the management and maintenance of adults across the lifespan with common health alterations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 626 |
| DNP | 626 | Management of Common Health Problems/Adults Across the Lifespan Practicum | Diagnosis, management, and application of advanced knowledge and skills in caring for adults across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 625 |
| DNP | 627 | Management of Complex Health Alterations in Adults Across the Lifespan | Focuses on application of EBP in care of adults of all ages with complex health alterations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 628 |
| DNP | 628 | Management of Adults Across the Lifespan w/Complex Health Alterations Practicum | Clinical practicum designed to apply principles of evidence-based practice in primary care management of adults across the lifespan with complex health alterations. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Corequisite(s): DNP 627 |
| DNP | 633 | Family Health Promotion | Focuses on concepts and strategies to promote, manage, and maintain health of children, adults, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major; Co-requisite: DNP 634 |
| DNP | 634 | Family Health Promotion Practicum | Clinical application of theories, concepts, and principles in the care of children. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major; Co-requisite: DNP 633 |

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| DNP | 635 | Management of Common Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of acute and common health problems in family practice across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 636 |
| DNP | 636 | Management of Common Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of acute and common problems in family practice across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 635 |
| DNP | 637 | Management of Complex and Chronic Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of complex and chronic problems in family practice across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 638 |
| DNP | 638 | Management of Complex and Chronic Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of complex and chronic problems in family practice across the life span for Family Nurse Practitioner role specialty. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 637 |
| DNP | 640 | Advanced Human Pathophysiology Pediatrics | Didactic course for pediatric nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 641 | Advanced Health Assessment Pediatrics | Skills-based advanced health assessment course that includes history-taking strategies and physical, functional, developmental, psychosocial health assessment of children (birth-21). | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 642 | Applied Pharmacotherapeutics for Pediatrics | Applies evidence-based pharmacotherapeutic principles to disease treatment and health promotion and maintenance for pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 643 | Developmentally Based Care of the Well Child | Offers information for theory-based developmental care of well children. Includes anticipatory guidance for parents and/or children/teens. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 644 |
| DNP | 644 | Well Child Advanced Practicum | Clinical application of theories, concepts and principles as they relate to the developmentally based care of the well child. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 643 |
| DNP | 645 | Management of Common Problems in Pediatric Primary Care | Provides health promotion and disease prevention strategies for the advanced nursing care of all children and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 646 |
| DNP | 646 | Management of Common Problems in Pediatric Primary Care Practicum | Facilitates development of advanced clinical skills in the assessment and management of child health, health surveillance and promotion. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 645 |
| DNP | 647 | Management of Complex and Chronic Health Problems in Pediatric Primary Care | Third pediatric didactic course focuses on assessment and management of childhood complex and chronic health problems and special health conditions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 648 |
| DNP | 648 | Management of Complex & Chronic Problems Pediatric Primary Care Practicum | Clinical course assists students in developing advanced clinical skills in decision making with chronically ill or special needs pediatric patients. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 647 |
| DNP | 650 | Advanced Human Pathophysiology Neonates | Didactic course for neonatal nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 651 | Advanced Health Assessment of Neonates | Skill-based course focuses on advanced health assessment skills, including history-taking strategies and the physical, functional, genetic, developmental, and psychosocial/cultural health assessment of neonates. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 652 | Applied Pharmacotherapeutics for Neonates | Focuses on the application of knowledge of pharmacological principles in the treatment of diseases and promotion of health for neonates and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 653 | Advanced Development and Family Health Promotion: Neonatal Theory I | Concepts, theories, interventions, and research related to the promotion, management, and maintenance of physical, behavioral, and developmental needs of at-risk newborns and infants and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 654 |
| DNP | 654 | Neonatal Practicum I | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 653 |
| DNP | 655 | Management of Common Neonatal Problems | Proactive neonatal theory course focusing on the concepts, theories, and research related to acute and chronic health deviations of neonates and infants. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 656 |
| DNP | 656 | Neonatal Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 655 |
| DNP | 657 | Management of Complex Problems in Neonates | Examines the application of knowledge of complex, multi-system alterations in neonatal health from a theoretical and research perspective in preparation for clinical practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 658 | Neonatal Practicum III: Management of Complex Problems in Neonates | Develops and applies advanced neonatal assessment, clinical decision making, and management skills to complex health alterations in at-risk neonates to include cultural, ethical, legal, and advocacy issues. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 657 |
| DNP | 659 | Embryology and Genetics | Prepares advanced practice nurses to use embryology, genetics, and physiology concepts within the nursing process in the care of pediatric and neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal, Pediatric or Family Nurse Practitioner) |
| DNP | 660 | Advanced Neuropsychopathology Lifespan | Manifestations of altered neurophysiology and psychopathology over the lifespan. Uses evidence-based support for theoretical views of psychiatric disorders to analyze the relationships of neuropsychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Child and Adolescent Mental Health Intervention or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 671 | Advanced Mental Health Assessment Across the Lifespan | Focuses on comprehensive mental health assessment of psychiatric disorders occurring in children, adolescents, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |

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| DNP | 672 | Psychopharmacology Across the Lifespan | Focuses on evidence-based use of medications for mental health disorders across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 673 | Mental Health Promotion Across the Lifespan | Focuses on evidence-based interventions to promote mental health across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 674 |
| DNP | 674 | Mental Health Promotion Across the Lifespan Practicum | Clinical experiences to become skilled in assessment and evidence-based individual intervention of mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 673 |
| DNP | 675 | Management of Common Mental Health Disorders Across the Lifespan | Emphasizes the assessment and evidence-based management of common mental health disorders across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner Co-requisite: DNP 676 |
| DNP | 676 | Management of Common Mental Health Disorders Across the Lifespan Practicum | Clinical experiences necessary to become skilled in the assessment and evidence-based management of the most common mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Corequisite: DNP 673 |
| DNP | 677 | Management of Complex & Chronic Mental Health Disorders Across the Lifespan | Focuses on modalities of evidence-based treatment with children, adolescents, adults, and families with complex and/or chronic psychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 678 |
| DNP | 678 | Management of Complex & Chronic MH Disorders Across the Lifespan Practicum | Clinical experiences in the assessment and evidence-based management of the most complex and chronic mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 677 |
| DNP | 679 | Biostatistics: Principles of Statistical Inference | Examines principles of statistical inference and their application to the analysis and interpretation of epidemiological, psychosocial, medical, nursing, and healthcare data. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| DNP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 682 | Geriatric Health Promotion | Examines theoretical perspectives in aging and cultural and contextual approaches for health promotion in older adults. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| DNP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| DNP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 703 | Innovation in Communication-Scholarly and Professional Writing | Provides a review of principles of scholarly and professional writing, plagiarism and APA 6th edition format. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: Doctor of Nursing Practice major |
| DNP | 704 | Principles of Evidenced-Based Care in Advanced Practice | Foundational course focuses on the evidence-based process and understanding of evidence-based practice principles assist advanced practice nurses and other healthcare professionals in clinical decision making in order to provide best care. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 705 | Healthcare Outcomes Management | Outcomes management methodology supports implementation of evidence-based practice and measurement of both patient and healthcare system outcomes attributed to adoption of best practices. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student; DNP 704 |

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| DNP | 706 | Implementing Sustainable Change toward Evidence-Based Practice | Facilitates student learning about striving for and evaluating sustainable change that hinges on active improvement of practices through implementing evidence-based practice (EBP). Students engage strategies designed to facilitate advanced practice nurses' leadership of this change. Students analyze the success of their evidence-based applied clinical project that is implemented in their clinical residency course. Students evaluate the impact of their doctorally prepared evidence-based advanced practice nurse role on shifting culture to best practice. Students explore the use of adult learning, ethical, and mentorship principles to facilitate understanding of EBP in their workplace. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice major; DNP 704; DNP 705; Co-requisite: DNP 712 |
| DNP | 707 | Disseminating Evidence to Advance Best Practice in Healthcare and Health Policy | Focuses on methods for dissemination of evidence to advance best practice within local, regional, and/or national settings, as well as advancement of EBP in health policy and the media. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Doctor of Nursing Practice major; DNP 704, 705 or 706. Corequisite(s): DNP 712 |
| DNP | 708 | Systems Thinking in a Complex Healthcare Environment | Studies basic and advanced systems principles as they relate innovation to the American healthcare system. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 709 | Individual and Innovation Leadership in Healthcare Practice | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 710 | Innovation in Communication and Information Systems in Nursing and Health | Examines principles of effective communication and information systems with a focus on evaluating and using emerging technologies as they relate to nursing and health care. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Doctor of Nursing Practice major |
| DNP | 711 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy with emphasis on strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 712 | Clinical Residency and Management | Demonstrates DNP competencies through portfolio documentation of clinical learning experiences and implementation of the DNP Evidence-Based Clinical Applied Project. Doctoral students submit the DNP Portfolio in partial fulfillment of the degree. | N | PRA | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Doctor of Nursing Practice student |
| DNP | 713 | Analysis of Organizational Cultures in Healthcare | Analyzes culture, organizational implications and relationships to change and innovation in healthcare. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 714 | Professional Relationships in Healthcare | Analyzes professional relationships within healthcare organizations and evidence-based strategies to improve communication, coordination, and collaboration. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 715 | Dynamics and Principles of Information in Healthcare | Analyzes and applies multiple sources of information for healthcare leaders across the continuum of evidence including research, evidence-based practice, translational research, improvement science, and quality improvement. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 716 | Leadership of Innovation in Healthcare | Analyzes leadership theories in the creation of complex healthcare system innovation. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice concentrations major |
| DNP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 100 | ASU Design Experience | Covers ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | REC | N | GNA | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): BS, BSD or BSLA Design School major. Credit is allowed for only DSC 100 or 194 (ASU Design Experience) |
| DSC | 101 | Design Awareness | Surveys cultural, global, and historical context for the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| DSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| DSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 236 | Introduction to Computer Modeling | Computers in design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Pre-requisite: Industrial Design student; Passed Milestone |
| DSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| DSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| DSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |

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|---------|-------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|---------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| DSC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design or PhD in Environmental Design & Planning student |
| DSC | 501 | Qualitative Research in Design | Theory and application of qualitative research. Emphasizes using ethnography to identify and specify innovative concepts and strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Industrial Design or Master of Science in Design major |
| DSC | 520 | Contemporary Design Issues | Issues influencing contemporary design such as sustainability, globalization, education, gender, collaboration and emotion. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 558 | Daylighting | Daylighting as a design determinant; concepts, techniques, methodology, experiments, and case studies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Herberger Institute of Design and the Arts graduate student |
| DSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design student |
| DSC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD or Design (Inter Design) MSD student |
| DSC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Master of Industrial Design, Master of Interior Architecture, Master of Science in Design, or Master of Visual Communication Design major |
| DSC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EAC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| ECD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECD | 211 | The Developing Child: Theory into Practice, Prenatal-Grade 3 | Examines process of physical, social, emotional, cognitive, language, and literacy development of young children; includes observation, practical application, fieldwork. May be repeated once for credit. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| ECD | 220 | Introduction to Nutrition, Health and Safety | Emphasizes providing proper nutrition, promoting a safe but challenging learning environment, and becoming knowledgeable of a child's health status. Also covers practical applications for assisting young children to develop good habits and attitudes and to assume lifelong responsibility for their own well-being. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| ECD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 302 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 312 | Social/Emotional Foundations of Learning | Foundations of early social development and evidence-based practices for promoting social-emotional development; young children's understanding, interactions, and relationships to the social world. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 313 | Technology in Early Childhood Education | Evaluates technology and technological learning tools for early childhood classrooms; integrates technology and its tools into students' learning. Lecture, discussion, active participation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 315 | Classroom Organization and Guidance of Young Children | Theories and strategies to guide children's development toward becoming self governing; typical and atypical behaviors; implementing age-appropriate classroom management techniques that foster individual, social, and academic competence. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 316 | Teacher Research: Studying Children in Context | Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 321 | Emerging Language and Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 323 | Building Home, School, and Community Partnerships | Knowledge and skills to facilitate positive and continuous family-school partnerships; family background, social context, family involvement, and current research on family-school interaction and academic success. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 324 | Social Studies and Creative Arts Curriculum, Instruction and Assessment | Social studies and creative arts standards, curriculum, and instructional and assessment strategies in an integrated social studies and creative expression curriculum for children birth through grade 3. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 341 | Administration/Evaluation of EC Programs | Administration and evaluation of early childhood programs. Emphasizes planning and evaluation; regulations; health, nutrition, and safety; operations, budgeting, and supervision of personnel. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 396 | Clinical Experience: K-3 Setting | Provides opportunities to engage as a teacher and learner in a K-3 classroom. Emphasizes focused observation; co-planning with a placement teacher and co-teaching lesson to whole groups, small groups, and individual students. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 397 | Clinical Experience: Preschool | Instruction, observation, and management of small groups and the whole class. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 406 | Assessment: Birth-Grade 3 | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 416 | Social and Educational Policies Affecting Children and Families | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links between policy, educational practice, schools, and family functioning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 418 | Instructional Methods for Young Children: Integrating Digital Media | Develops integrated experiences with children's literature for facilitating development in reading, writing, speaking, and listening. Further develops educational strategies for promoting growth in the social studies and creative arts curriculum, and instructional/assessment strategies for preprimary- and primary-level children; developmentally appropriate methods and strategies for effective instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECD | 477 | Student Teaching: Birth to Pre-K | Supervised practicum in a birth to pre-K program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 4-6 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 478 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |

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| ECD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ECD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 496 | Field Experience | Instruction and management of small groups and substantial work with the whole class. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECD | 503 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| ECD | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 505 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 520 | Child Guidance and Management: Child, Family, Community, and Culture | Introductory exploration of a variety of techniques for developing a positive classroom environment. Includes overview of several classroom and school management programs and possible effects of implementation. Focuses on observations made during the students' classroom and field experiences. Provides the catalyst for introducing students to the program's professional portfolio requirement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 527 | Mathematics in Early Childhood Education | Theory and practice in the use of manipulative materials for teaching mathematics to preschool and primary grade children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 541 | Assessment of Young Children | Assessment principles, techniques, and issues related to guiding learning for children birth through eight years. Test construction, interpretation and communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 549 | Foundations of Diversity, Human Development, and the Young Child | Historical foundations and theories of child development as examined with a concern for diversity, multidirectional human change, and cultural embeddedness. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 565 | Appropriate Instructional Methodologies for Young Children | Surveys appropriate teaching methodologies for young children across the curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 570 | Pre-K Internship | Field experience working with children between the ages of birth-age 4. Required for Arizona Dept. of Education Early Childhood Endorsement and Certification. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 571 | Pre-K Student Teaching | Supervised student teaching in which a student works with children between the ages of birth to age 4. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 4 | | Pre-requisite: Graduate student |
| ECD | 578 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| ECD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student |
| ECD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECN | 211 | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECN | 212 | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| ECN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| ECN | 211 | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 212 | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 213 | Honors Macroeconomics | Introduces modern macroeconomic analysis. Theory of national income, unemployment, inflation, and economic growth and its application to economic policy. Not open to students with credit in ECN 313. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 210, 211, 270 or 271 with C or better |
| ECN | 214 | Honors Microeconomics | Introduces modern microeconomic analysis. Theories of consumer behavior, production, and cost. Output and price determination in a variety of market settings. Not open to students with credit in ECN 314. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 221 | Business Statistics | Methods of statistical description. Applies probability theory and statistical inference in business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | CS | Prerequisite(s): MAT 211 or 271 with C or better |
| ECN | 231 | Honors Business Statistics | Applies statistical methods used in business and economic modeling and research. Emphasizes regression analysis and modeling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | CS | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: Barrett Honors student; Pre/Co-requisite: MAT 210, 211, 270, 271 or 272 with C or better if completed |
| ECN | 303 | Honors Managerial Economics | Develops a basic platform for managerial decision making. Applies basic economic concepts and models to actual business practices. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 214 or 312/314 with C or better |
| ECN | 306 | Survey of International Economics | Surveys international trade issues, commercial policy, trade theory, customs unions, and international monetary topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |
| ECN | 312 | Intermediate Microeconomic Theory | Role of the price system in organizing economic activity under varying degrees of competition. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisite(s): ECN 211 or 213 with C or better; ECN 212 or 214 with C or better; MAT 211, 266 or 271 with C or better |
| ECN | 313 | Intermediate Macroeconomic Theory | Determinants of aggregate levels of employment, output, and income of an economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or ECN 312/314 with C or better |
| ECN | 315 | Money & Banking | Functions of money. Monetary systems, credit functions, banking practices, and central banking policy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 331 | Economics of the European Economic Union | Examines broad economic policies seeking to influence individuals' decisions, the history of European economic development and policies, as well as institutions and social systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 335 | South Asia and the World Economy | Develops and discusses alternative theories of trade, development, and growth in the context of south Asia and the world economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |
| ECN | 345 | Survey of Environmental and Resource Economics | Economic principles applied to private and public policy decisions involving environmental resources, natural resource management, and policy analyses. Focuses on how economic methods can contribute to making better environmental decisions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better. |
| ECN | 355 | Economics of Healthcare | Uses economic tools and models to discuss and evaluate the American healthcare system. Applies standard concepts in microeconomics, macroeconomics, and public choice economics to the study of the evolution and the current state of the healthcare system and to the study of proposals for change. Focuses on the promise and problems of using economic tools in a historical, ethical, and cultural context to understand the current healthcare system. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213; ECN 212 or 214 and MAT 211 or 271 with C or better. |
| ECN | 360 | Economic Development | Theories of economic growth and development. Role of capital formation, technological innovation, population, and resource development in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 365 | Economics of Russia and Eastern Europe | Origins and analysis of contemporary institutions. Comparative development and differentiation in the 20th century. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECN | 382 | Managerial Economics | Applies economic analysis to managerial decision making. Market analysis in the context of the socio-legal environment. Does not satisfy Economics major requirements. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Not open to Economics or Business majors. Minimum 2.0 ASU cumulative GPA and minimum of 56 total earned hours OR Non-degree student with minimum 2.0 ASU cum GPA OR Graduate student. |
| ECN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 404 | History of Economic Thought | Development of economic doctrines, theories of mercantilism, physiocracy, classicism, neoclassicism, Marxism, and contemporary economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 410 | Applied Regression Analysis and Forecasting | Applies regression techniques to forecasting in business and institutional environments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 413 | Advanced Honors Macroeconomics | Develops and uses various macroeconomic models to evaluate important economic policies. Emphasizes honing students' policy evaluation skills. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 414 | Advanced Honors Microeconomics | Develops and uses various microeconomic models to evaluate important economic issues. Emphasizes the economics of uncertainty and information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 416 | Game Theory and Economic Behavior | Introduces game theory and its application to various economic situations under conditions of complete and incomplete information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 421 | Labor Economics | Labor supply and demand, unemployment, determinants of wages, earnings inequality, labor unions and the structure of labor contracts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisites: ECN 214 or 312 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 423 | Economics of Education | Focuses on educational decisions, including individual choices, institutional strategies and government policies. Topics include measuring the costs and returns of education, the relationship between education and inequality, and the role of K-12 and postsecondary institutions in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 or 312 with C or better; Pre- or corequisite(s): ECN 213 or 313; Credit is allowed for only ECN 423 or 494 (Economics of Education) |
| ECN | 425 | Introduction to Econometrics | Elements of regression analysis: estimation, hypothesis tests, prediction. Emphasizes use of econometric results in assessment of economic theories. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 436 | International Trade Theory | Comparative-advantage doctrine, including practices under varying commercial policy approaches. Economic impact of international disequilibrium. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 438 | International Monetary Economics | History, theory, and policy of international monetary economics. Balance of payments and exchange rates. International financial markets, including Eurocurrency markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Prerequisite(s): ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 441 | Public Economics | Public goods, externalities, voting models, public expenditures, taxation, and budget formation with emphasis on the federal government. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-reqs: ECN 214 or ECN 312/314 with C or greater; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 445 | Environmental Economics | Advanced topics in environmental economics with quantitative methods for developing information that is used for environmental policy making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 214 or 312 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313. |
| ECN | 450 | Law and Economics | Economics of the legal system, including analysis of property, contracts, torts, commercial law, and other topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 453 | Industrial Organization and Competition Policy | Development of public policies toward business. Antitrust activity, Economic effects of government policies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 455 | Health Economics | Focuses on health care decisions, including individual and government policies. Topics include demand for and supply of health care, payment for health care, the impact of health care reform and the techniques economists use to evaluate health care interventions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 (or ECN 312) with C or better. Pre- or corequisite(s): ECN 213 (or ECN 313); Credit is allowed for only ECN 455 or 494 (Health Economics) |
| ECN | 470 | Mathematical Economics | Integrates economic analysis and mathematical methods into a comprehensive body of knowledge within contemporary economic theory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 475 | Capstone in Economics | Capstone course integrating several areas of economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | L | Pre-reqs: ECN 213 or 313 with C or better; ECN 214 or ECN 312/314 with C or better. Senior standing. |
| ECN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Minimum 3.0 ASU cum GPA; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Pre-requisites: Barrett Honors W. P. Carey undergraduate student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Pre-requisites: Barrett Honors W. P. Carey BS or BA student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-7 | L | Pre-requisites: ECN 313 and 314 with C or better |
| ECN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |

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| ECN | 501 | Statistics for Managers | Fundamentals of statistical analysis to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 502 | Managerial Economics | Applies microeconomic analysis to managerial decision making in areas of demand, production, cost, and pricing. Evaluates competitive strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 503 | Global Business Environment | Macroeconomic analysis of issues related to economic growth, inflation, interest rates behavior, unemployment, exchange rate determination, and global competitiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 510 | Microeconomic Theory and Applications | Applies economic theory to production, consumer demand, exchange, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 525 | Applied Regression Models | Simple linear regression, multiple regression, indicator variables, and logistic regression. Emphasizes business and economic applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 527 | Categorical Data Analysis | Discrete data analysis in business research. Multidimensional contingency tables and other discrete models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 525 |
| ECN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 712 and 714 with C or better |
| ECN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 711 | Macroeconomic Analysis I | Current theories of output, employment, inflation, and asset prices as well as major aggregates. Introduces dynamic optimization techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 712 | Microeconomic Analysis I | Theory of production, consumer demand, resource use, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 713 | Macroeconomic Analysis II | Focuses on growth theory, dynamic general equilibrium models, monetary theory, open-economy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 714 | Microeconomic Analysis II | General equilibrium, welfare economics, production, and capital theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |

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| ECN | 715 | Advanced Macroeconomic Analysis | Focuses on current research areas in macroeconomics and monetary theory with emphasis on methods in economic dynamics and numerical techniques. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 with C or better; ECN 713 with C+ or better |
| ECN | 716 | Advanced Economic Theory I | Economic behavior under uncertainty; markets and contracts under asymmetric information; the theory of games with incomplete information and applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 714 with C or better; ECN 712 with C+ or better |
| ECN | 717 | International Macroeconomics | Intertemporal approach to the current account, international business cycles, international risksharing and home bias, models of exchange rate determination, balance of payment crises, sovereign debt and default. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 721 | Labor Economics I | Develops basic theoretical models for analyzing labor market issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 722 | Labor Economics II | Extensions/criticisms of labor market theories. Applications to a variety of policy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 721 with C or better |
| ECN | 725 | Econometrics I | Problems in the formulation of econometric models. Emphasizes estimation, hypothesis testing, and forecast of general linear models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 726 | Econometrics II | Estimation and inference of qualitative and limited dependent variable models as well as general multiple equation models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 725 with C+ or better |
| ECN | 727 | Quantitative Methods in Economics | Generalized method of moment estimation, estimation with censored and truncated samples, nonlinear models, panel-data models, econometrics of nonstationarities. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 736 | International Trade Theory | Theories of comparative advantage and their empirical verification. Theory and political economy of commercial policy. Resource transfers and the role of the multinational corporation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 741 | Public Economics | Economics of collective action, public spending, taxation, and politics. Impact of central governmental activity on resource allocation and income distribution. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey Graduate degree-seeking students only; ECN 712 with B or better; Co-requisite: ECN 714 |
| ECN | 753 | Industrial Organization | Analyzes structure, conduct, and performance in industrial markets; the economics of organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 760 | Economics of Growth and Development | Economic problems, issues, and policy decisions facing the developing nations of the world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 and 712 with C+ or better; Co-requisite: ECN 713 and 714 |
| ECN | 770 | Mathematics for Economists | Surveys mathematical ideas encountered in economics and econometrics. Topics include measure theory, probability theory, and mathematical statistics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 784 | Internship | | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECS | 310 | Foundations in Typical / Atypical Child Development | Examines the process of typical and atypical physical, social, emotional, cognitive, and language development of young children with or at risk for delay. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 312 | Social and Emotional Development of the Young Child | Examines genetic, environmental and biological influences on typical and atypical social and emotional developmental processes through current research, current issues, as well as connections to practice. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): Minimum junior standing |
| ECS | 315 | Classroom Organization and Child Guidance | Develops and implements analysis, intervention, and consultation strategies for effective management of classroom behavior for students with and without disabilities. Age-appropriate techniques addressing individual, social, and academic competence. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 316 | Assessment/Evidence-based Practice | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |

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| ECS | 321 | Communication, Language Development, and Emergent Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECS | 397 | Practicum in Inclusive Birth-Age 5 Early Childhood Setting | Provides opportunities for students to engage as a teacher and learner in an inclusive birth to age 5 early childhood setting. Emphasizes focused observation, co-planning with a placement teacher, and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2-4 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 411 | Instructional Methodologies for Young Children: STEM | Explores, applies and integrates STEM (Science, Technology, Engineering and Math) content, project-enhanced instructional strategies and assessments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 412 | Mathematics Curriculum, Instruction and Assessment | Focuses on math content, methods, skills, and attitudes to be considered in teaching young children. Examines the theoretical foundation for young children's inquiry and learning. Methods focus on practical application of theory in classroom practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 413 | Literacy Curriculum, Instruction and Assessment | Extends ECD 321; language and literacy development in K-3 classrooms; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 420 | Evaluation and Intervention Strategies for Infants, Toddlers and Preschoolers with Disabilities | Students will learn to screen, assess and provide services to young children with special needs using norm-referenced, criterion-referenced, and formative assessments to determine special education eligibility, plan individualized family service programs, and monitor progress for eligible students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| ECS | 430 | Systems, Policy, and Advocacy in Early Childhood/Special Education | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links among policy, educational practice, schools, and family functioning that have a direct impact on both typical and special needs children in early childhood programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 431 | Family, Community and Professional Support Systems | Covers methods and issues in cooperative teaching for special education students in general education classrooms, with an emphasis on collaborative communication skills for working with a variety of school professionals and families. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program OR enrolled in Educational Studies program OR enrolled in Early Childhood minor |
| ECS | 478 | Student Teaching K-3 Special Education | Student teaching in an inclusive birth to age 5 early childhood special education setting. Synthesizes experience in curriculum, instruction, and classroom management. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-6 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECT | 479 | Capstone Seminar in ECT | Reflective, experience-based integration of theory and practice; professional development for preschool through grade 3 teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| EDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDA | 501 | Competency/Performance in Educational Administration | Nature of educational administration and the concept of competency as it applies to educational administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 511 | School Law | Interpreting state and federal law and policy in school settings. Includes statutory authority for administrators, liability, constitutional rights, law, and ethics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 514 | Leadership in Curriculum and Assessment | Curriculum and assessment responsibilities of school administrators. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 526 | Instructional Supervision | Administering curriculum improvement, in-service education, evaluating, and improving teaching competence; administrative instructional responsibilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 548 | School, Family, and Community Connections | Administrative factors of primary importance in developing community involvement in public schools. Emphasizes theory and skill of school system and individual communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 572 | School Finance and Human Resources | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and school financial affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 578 | Critical Issues in Educational Leadership | Explores current critical issues in school leadership, including student support and relationships with governmental agencies and the community. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 611 | Educational Policy and the Law | Emphasizes policy analysis and application of federal and state law to policy evaluation and development in public schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 634 | Instructional Leadership | Theory, practice, and issues in school change and reform with a focus on leading change efforts at the school site. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 676 | The School Superintendency | Critical examination of the school superintendency and the primary functions of this educational position. Includes the duties, responsibilities, activities, and problems of the school superintendent. Examines the unique leadership role of the school superintendent. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 679 | Administration of Special Programs in Education | For personnel administering special education and federal programs; responsibilities of principals, supervisors, counselors, and directors for special education and federally funded programs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 685 | Education in Global Contexts | Global perspectives on education in contemporary society with emphasis on social, political, and economic factors that affect access and equity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-6 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 772 | School District Human Resources and Business Management | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and business affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 773 | The Superintendent and School District Leadership Roles and Responsibilities | Examines management roles and responsibilities of public school district superintendents and other leaders in identifying and addressing critical issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 302 | Assessment and Evaluation in Education | Applies assessment and evaluation principles to education contexts, using a case format. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |

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| EDP | 310 | Educational Psychology for Non-Teachers | Human behavior in educational situations. Individual differences, factors affecting learning, behavioral and cognitive learning, motivation, testing, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | SB | |
| EDP | 311 | Educational Psychology for Future Teachers | Planning and conducting effective instruction based on learning theories and principles. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | SB | Prerequisite(s): Teachers College major, minor or certificate student |
| EDP | 313 | Childhood and Adolescence | Principles underlying total development of pre- and early-adolescent children. Emphasizes physical, intellectual, social, and emotional development with practical implications for teachers. Meets ADE requirement for one course in early adolescent psychology for middle grade endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| EDP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 454 | Statistical Data Analysis in Education | Role of data analysis in research and decision making. Elements of exploratory data analysis, descriptive indexes, and statistical inference. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | |
| EDP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| EDP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EDP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EDP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| EDP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDP | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 514 | Psychology of the Adolescent | Cognitive, physical, and social development of adolescents in contemporary society. Impact of family, school, and workplace on adolescent development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 523 | Educational Assessment | Increases teachers' and others' competence in classroom assessment, grading, and testing. Emphasizes integration of curriculum, instruction, and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 530 | Theoretical Issues and Research in Human Development | Psychological theories, research, and methods relevant to human development, emphasizing the relations between early development and later performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 536 | Physiology of Behavioral Disorders | Critical study of nervous system, brain function for fundamental behaviors, and system dysfunctions in mental/neurological disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 540 | Theoretical Views of Learning | Classical and cognitive theories of learning, plus recent orientations. Illustrative experimental and rational foundations; implications for educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or undergraduate postbaccalaureate student; Credit is allowed for only EDP 540 or LSE 540 |
| EDP | 541 | Motivating Students to Learn | Examines multiple perspectives on motivation and the management of learning environments as bases for reflecting on educational practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 552 | Multiple Regression and Correlation Methods | Educational applications of regression techniques. Quantitative and qualitative predictors, curvilinear trends, and interactions. Emphasizes analyzing data and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 554 | Analysis-of-Variance Methods | Educational applications of ANOVA techniques. Between- and within-subjects designs, multiple comparisons. Emphasizes using statistical software and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 563 | Consultation and Supervision | Examines consultation and supervision research relevant to school psychology practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |

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| EDP | 566 | Advanced Psychoeducational Practice | Develops advanced knowledge and skills in psychoeducational assessment and intervention with an emphasis on case conceptualization and evidence-based methods. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDP 560 and 562 with B or better |
| EDP | 567 | School Psychological Services for Diverse Populations | Examines historical, legal, ethical, and practical issues involved in the delivery of school psychological services to diverse populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 568 | Psychological Assessment and Intervention | Skills-building course emphasizing interventions, assessment, and outcome-based educational decisions for students experiencing emotional and/or behavioral difficulties. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 597 | Applied Research and Reflection | The dual purpose of the project is to synthesize learning from multiple areas of scholarship on teaching and learning, and to reflect on the content and process of the master's degree program. Culminating product includes a reflective paper with a corresponding project, such as a literature review, curricular model, technology product, or other project as agreed upon by the student and the student's advisor. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 651 | Methods and Practices of Qualitative Research | Advanced course for students familiar with theory and extant work. Topics include data collection, analysis, reporting, and an extensive fieldwork project. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: COE 503 with C or better |
| EDP | 652 | Multivariate Procedures for Data Analysis | Educational applications of multivariate methods, including MANOVA, discriminant analysis, and exploratory factor analysis. Emphasizes analyzing data and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 654 | Structural Equation Modeling in Educational Research | Educational applications of confirmatory factor analysis, path analysis, and full latent variable models. Experience in conducting analyses and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| EDS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 200 | Design Literacy and Communication | Builds the requisite skills for students to be able to express their ideas visually. Gives exercises to create an understanding of basic principles of design as well as design communication, principles of composition and aesthetic evaluation. Uses tools such as sketching, drawing, computer graphics and model making as a vehicle to develop an understanding of visual methods of expressing one's self. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or The Arts (Fashion Design) major |
| EDS | 201 | Fundamentals of Sustainability in Design | Explores sustainability as it relates to the key disciplines that comprise environmental design. Topics range from issues affecting the preservation of the urban fabric to the development of earth-friendly materials used by interior designers and product designers to the design of sustainable buildings by architects through the use of appropriate materials and requisite energy efficiencies. Surveys the literature of sustainability, identifying critical issues on the subject today. Explores the theoretical underpinnings of the sustainability movement as it affects environmental design and related disciplines. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 223 | Design Thinking | Introduces the notion of design thinking, a concept that is gaining significant recognition in several disciplines including art, design, business, engineering and others. Design thinking can be described as a creative, multidisciplinary, human-centered approach to solving complex problems. Contemporary society faces numerous challenges, and the need for new tools and methods to tackle and solve these problems is more pressing than ever before. Offers several new techniques of design thinking and creative problem solving through engaging lectures and exciting projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

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| EDS | 301 | Contemporary Issues in Design Strategies and Innovation | Covers theories and methods needed in design, innovation and management of environmental design projects. Uses best practices and case studies related to the design of artifacts and to the design of built environments as a vehicle to develop students' understanding of different aspects of environmental design in a real-world setting. Also discusses the impact of contemporary issues such as globalization, digital tools, global connectivity on the theories and practice of environmental design. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre- or corequisite(s): EDS 200 |
| EDS | 302 | Design Inquiry and Undergraduate Research | Theories and methods of design inquiry within a research environment. Prepares students for the senior-year synthesis courses. Students take on design-related research and develop and write a proposal for an integrative experience/project for an environmental design intervention and make an implementation plan to realize this intervention. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 301 |
| EDS | 394 | Special Topics | | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 401 | Environmental Design Synthesis I | First of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students identify a relevant research problem in environmental design and undertake the necessary literature search and reading regarding theories and methods related to the selected research question. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 302 |
| EDS | 402 | Environmental Design Synthesis II | Second of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students implement the research study identified in the first semester of the two-semester sequence. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 401 |
| EDS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| EDS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| EDS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| EDT | 180 | Technology Literacy: Problem Solving using Digital Technology Applications | Introducing digital technologies and their place in society. Applies 21st-century skills to problem solving using digital technology applications including spreadsheets and databases. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 184 | Modeling, Inquiry, & Analysis Using Technology Tools | Project-based course as an overview of modeling, simulation, statistics, probability, and the role of technology in education, business and personal. Investigates exploration and presentation of emerging technology along with their acquisition, use, and implementation into society. Course includes the use of software programs and online simulations for scientific investigation, internet research, data collection, visual representation of data, probability, measures of central tendency, Action Research, 3D modeling, and Web page design. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 210 | Games, Technology and Society | Introduces the role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |

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| EDT | 220 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| EDT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 310 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| EDT | 321 | Computer Literacy: Mobile Technologies and Your World | Uses mobile technologies across disciplines for communication, collaboration, creativity and problem solving. Employs digital tools including Microsoft Office's spreadsheets and databases, Google apps, mobile apps, and a variety of other Web-based tools in problem-based environments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Pre-requisite: Minimum 45 hours; Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 329 | Games, Simulations, and Virtual Environments | Focuses on the use of Gaming, Simulations, and Virtual Environments (GS/VE) in education and instruction. Examines how educational professionals and other practitioners can leverage students interests in digital culture to accelerate their learning. Participants explore the foundational, social, and cultural implications of these new media and the power they hold to engage learners in new ways. Discusses historical overview of GS/VE with an emphasis on educational applications. Analyzes the distinctive features of GS/VE from different pedagogical, psychological (cognitive/emotional), social, and entertainment perspectives. Participants learn how to analyze the design of games, simulations, and virtual environments, creating evaluative criteria for the selection of products in educational environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 340 | Designing Games for Impact | Introduces concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| EDT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 460 | Games, Technology and Society | Education, healthcare and social activism. Explores general theories about the relationship between technology and society using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. Students play and analyze existing impact games as well as conduct a landscape analysis for an impact game on a topic of their own choosing. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only EDT 460 or EDT 560 |
| EDT | 461 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| EDT | 462 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| EDT | 463 | Games for Impact: The Full Life Cycle | Presents an impact game publishing methodology covering the full life cycle and key considerations for impact game design, development and publishing as well as the unique challenges in making games for impact. Applies methodology to examine an existing impact game currently in development. Students collaboratively workshop an original impact game concept and publishing plan that harnesses the power of games to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing. Credit is allowed for only EDT 463 or EDT 563 |

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| EDT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | IND | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDT | 501 | Foundations and Issues in Educational Technology | Introduces educational technology. Examines accomplishments and issues in the field. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 502 | Design and Development of Instruction | Design, development, and formative evaluation of objectives-based instructional materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 503 | Instructional Media Design | Uses media selection, design, and production principles to prepare design specifications for solutions to instructional messages and products. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 504 | Development of Computer-Based Instruction | Systematic design, development, and formative evaluation of computer-based instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 506 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 507 | Trends in Performance Improvement | Introduces the field of human performance technology. Emphasizes the analysis of performance problems, their causes, and interventions. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 with B or better |
| EDT | 523 | Distance Education Theory and Practice | Explores development of distance learning principles by examining national and international systems and applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 524 | Principles and Issues in K-12 Online Learning | Examines current issues, policies, and trends pertaining to K-12 Web-based teaching and learning. Actively explores research related to online learning, with a focus on virtual schooling and emerging best practices for effective online instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Practicing or licensed K-12 teacher |
| EDT | 530 | Technology Integration Methods across the Curriculum | Examines a constructivist approach to technology in education. Investigates technology as a catalyst for rethinking instructional goals and practices. | Y | LEL | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 540 | Creating and Marketing Mobile Apps | Focuses on conceptualizing, creating and marketing of apps for mobile devices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EDT 494 (Concept, creating & mktg APPS), 540 or 594 (Concept, creating & mktg APPS) |
| EDT | 545 | Using the Internet in Education | Explores the Internet as an educational tool for research, inquiry-based learning, and online learning communities. Incorporates constructivist theory. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 560 | Games, Technology and Society | The role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 460 or EDT 560 |
| EDT | 561 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 562 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 563 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 463 or EDT 563 |
| EDT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EDT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 701 | Research in Educational Technology | Review and analysis of research studies in educational technology. Methodology for designing, conducting, and reporting educational technology research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 and 502 with C or better |
| EDT | 704 | Emerging Technologies in Education | Examines the role and impact of emerging technologies in education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only EDT 591 (Emerging Technologies in Education) or 704 |
| EDT | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisites: EDT 701 with C or better |

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| EDT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or Postbaccalaureate student) |
| EDT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 309 | Environmental Education Project | Covers topics in environmental education that assist students with being able to learn about and investigate their environment in order to make intelligent and informed decisions. | Y | LEL | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only EED 412, 494 (Project Wild Aquatic) or 494 (Project Wet) |
| EED | 324 | Social Studies in Elementary Schools | Social studies education standards, curriculum, and instructional and assessment strategies for all children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 or SPE 396; Admission to Professional Teacher Preparation Program |
| EED | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EED | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| EED | 433 | Language Method Management and Assessment | Theory on the social nature of oral and written language and congruent teaching, management, and assessment practices. Uses technology to enrich language instruction. Students who own a personal laptop computer are encouraged to bring it to class to engage in interactive technology-based literacy teaching and learning. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 478 | Student Teaching in the Elementary School | Student teaching in elementary school classrooms. Synthesized experience in curriculum, instruction, and classroom management | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 496 | Field Experience III | Applies course content in a K-78 school classroom. Emphasizes observation, pupil management, planning and delivery of instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | L | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EED | 511 | Principles of Curriculum Development | Contemporary curriculum theories. Curriculum as an interrelated entity. Principles of conceiving and effecting change. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 521 | Instructional Planning and Management in the Inclusive Classroom | Planning and delivering instruction; organizing and managing classrooms; making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 524 | Integrated Social Studies Methods for Elementary Classrooms | Social studies methods and standards applied across the curriculum, instructional and assessment strategies for all children in K-8 classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 526 | Communication Arts in the Elementary School | Critical examination of school language arts teaching, focusing on theoretical assumptions regarding oral- and written-language development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 529 | Science in the Elementary School | Problems and trends of current programs. Development of a balanced and articulated science program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 531 | Teaching with Educational Technology | Focuses on using technology in K-12 classrooms. Addresses the integration of technology in all curricular areas for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 537 | Mathematics in the Elementary School | Contemporary mathematics teaching. Content, materials, and approaches to instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 576 | Clinical Experience | Applies course content in elementary classrooms: observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 577 | Clinical Experience II | Advanced application of course content in elementary education classrooms; observations, pupil management, planning, and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: EED 576 |
| EED | 578 | Student Teaching in the Elementary School | Student teaching in elementary education setting for students in the MED with Concentration in Teacher Certification. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 579 | Apprentice Teaching in Elementary Education | Apprentice teaching in elementary school classrooms. Must be taken four times for a total of 9 semester hours. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EEE | 101 | Introduction to Engineering Design | Introduces engineering design, teaming, engineering profession; computer models and programming; communication skills; design of electrical and computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 2 | | |
| EEE | 120 | Digital Design Fundamentals | Number systems; conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | |
| EEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | |
| EEE | 202 | Circuits I | Principles for analyzing linear and nonlinear circuits. Uses SPICE and MATLAB. Design and measurement of linear analog electrical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Pre/Co-requisites: MAT 274 (or MAT 275), and PHY 131 (with C or better if completed) |
| EEE | 203 | Signals and Systems I | Introduces continuous and discrete time signal and system analysis, linear systems, Fourier, and z-transforms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: EEE 202; Pre-requisite: MAT 242 with C or better if completed or Pre/Co-requisite: MAT 342 or 343 with C or better if completed |
| EEE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization. Instruction set architecture. Assembly language. Processor organization and design. Memory organization. IO programming. Exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: CSE 100, 110 or 200; CSE 120 or EEE 120; Credit is allowed for only EEE 230 or CSE 230 |
| EEE | 241 | Fundamentals of Electromagnetics | Vector analysis, differential operators, fourier analysis, scalar, vector fields, electro/magneto statics, time-varying fields, boundary value problems, dielectric, magnetic materials, Maxwell's equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): MAT 267 or 272 with C or better; MAT 274 or 275 with C or better; PHY 131 with C or better; Pre- or corequisite(s): EEE 202 |

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|---------|-------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 304 | Signals and Systems II | Communication, signal processing, control systems, continuous, discrete transforms, sampling theorem, analog, digital modulation, filter design, signal processing applications, state space. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 |
| EEE | 333 | Hardware Design Languages and Programmable Logic | Develops digital logic with modern practices of hardware description languages. Emphasizes usage, synthesis of digital systems for programmable logic, VLSI. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 202 |
| EEE | 334 | Circuits II | Design of analog and digital circuits. Diodes/BJTs/Mosfets. Digital and analog circuit building blocks. Fundamentals of mixed signal circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, BHSE undergraduate student or Computer Systems Engineering or Computer Systems Engineering (Information Assurance) student; EEE 202 |
| EEE | 335 | Analog and Digital Circuits | Analog, digital microelectronic circuits and systems. Amplifiers, frequency response, gate sizing, timing analysis, sequential digital circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 334 |
| EEE | 341 | Engineering Electromagnetics | Time-varying electromagnetic fields, waves in homogeneous and stratified media, transmission lines, waveguides and cavity resonators, radiation and antennas. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203; EEE 241 |
| EEE | 350 | Random Signal Analysis | Probabilistic and statistical analysis as applied to electrical signals and systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; MAE 317 or pre- or corequisite: EEE 203; or Fulton Engineering graduate student |
| EEE | 352 | Properties of Electronic Materials | Schrodinger's wave equation, potential barrier problems, bonds of crystals, the band theory of solids, semiconductors, superconductor dielectric, and magnetic properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114, 115, 116 or 118; EEE 241; PHY 241 with a C or better |
| EEE | 360 | Energy Systems and Power Electronics | Conventional and alternate energy sources for power systems, three-phase analysis, AC generators, transformers, induction, DC motors, power electronic speed control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 202, Pre- or corequisite(s): EEE 241 |
| EEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 404 | Real-Time DSP Systems | Digital signal processors, translating signals and systems concepts into real-time multimedia and communications applications, real-time algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CSE 230 or EEE 230; EEE 203 |
| EEE | 407 | Digital Signal Processing | Time and frequency domain analysis, difference equations, z-transform, FIR and IIR digital filter design, discrete Fourier transform, FFT, and random sequences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisites: Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203; MAT 342 or 343 with C or better |
| EEE | 425 | Digital Systems and Circuits | Digital logic gate analysis and design. Propagation delay times, fan out, power dissipation, noise margins. Design of MOS and bipolar logic families, including NMOS, CMOS, standard and advanced TTL, ECL, and BiCMOS. Inverter, combinational and sequential logic circuit design, MOS memories, VLSI circuits. Computer simulations using PSPICE. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 335 |
| EEE | 433 | Analog Integrated Circuits | Analysis, design, and applications of modern analog circuits using integrated bipolar and field-effect transistor technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 335 |
| EEE | 434 | Quantum Mechanics for Engineers | Angular momentum, wave packets, Schroedinger wave equation, probability, problems in one dimension, principles of wave mechanics, scattering, tunneling, central forces, angular momentum, hydrogen atom, perturbation theory, variational techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 435 | Fundamentals of CMOS and MEMS | Introduces basic CMOS processing and fabrication tools. Covers the fundamentals of thermal oxidation, CVD, implantation, diffusion, and process integration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 436 | Fundamentals of Solid-State Devices | Semiconductor fundamentals, pn junctions, metal-semiconductor contacts, metal-oxide-semiconductor capacitors and field-effect transistors, bipolar junction transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 437 | Optoelectronics | Basic operating principles of various types of optoelectronic devices that play important roles in commercial and communication electronics; light-emitting diodes, injection lasers, and photodetectors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 436 |
| EEE | 439 | Semiconductor Facilities and Cleanroom Practices | Microcontamination, controlled environments, cleanroom layout and systems, modeling, codes and legislation, ultrapure water, production materials, personnel and operations, hazard management, advanced concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 443 | Antennas for Wireless Communications | Fundamental parameters; radiation integrals; wireless systems; wire, loop, and microstrip antennas; antenna arrays; smart antennas; ground effects; multipath. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 |
| EEE | 445 | Microwaves | Waveguides; circuit theory for waveguiding systems; microwave devices, systems, and energy sources; striplines and microstrips; impedance matching transformers; measurements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 (EEE 340) |
| EEE | 448 | Fiber Optics | Principles of fiber-optic communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 (EEE 340) |
| EEE | 455 | Communication Systems | Signal analysis techniques applied to the operation of electrical communication systems. Introduction to and overview of modern digital and analog communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 350 |
| EEE | 459 | Communication Networks | Fundamentals of communication networks. Study of Seven-Layer OSI model. Focus on functionality and performance of protocols used in communication networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203, Corequisite(s): EEE 350 |

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| EEE | 460 | Nuclear Power Engineering | Radioactivity and decay. Radiation interactions and dose. Nuclear reaction, fission and fusion theory. Fission reactors, four factor formula, moderation. Nuclear power, TMI, Chernobyl, Nuclear fuel cycle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114 or 116; MAT 274 or 275 with C or better; PHY 241 or 361 with C or better |
| EEE | 463 | Electrical Power Plants | Generation of electric power using fossil, nuclear, and renewable, including solar, geothermal, wind, hydroelectric, biomass and ocean, energy sources. Power plant thermal cycle analysis. Cogeneration and combined cycles. Economics, operations, and design of electric power stations. Energy storage. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114 or 116; MAE 240 (or ECE 340) or PHY 241 with C or better; MAT 274 or 275 with C or better |
| EEE | 465 | Photovoltaic Energy Conversion | Photovoltaics for production of electricity from solar energy. The grand energy challenge. Solar radiation and utilization. Fundamentals of semiconductors for photovoltaics: crystal structures, band theory, doping, carrier statistics, optical absorption, and p-n junctions. Principles of solar cells including loss mechanisms and design principles. Current solar cell technologies. Manufacturing of silicon solar cells. Solar modules, arrays and systems. Economic analysis of solar photovoltaic systems. Terawatt-scale deployment of solar cells. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352; Credit is allowed for only EEE 465 or 498: Solar Energy |
| EEE | 470 | Electric Power Devices | Analyzes devices used for short circuit protection, including circuit breakers, relays, and current and voltage transducers. Protection against switching and lightning over voltages. Insulation coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 471 | Power System Analysis | Review of transmission line parameter calculation. Zero sequence impedance, symmetrical components for fault analysis, short circuit calculation, review of power flow analysis, power system stability, and power system control concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 472 | Power Electronics and Power Management | Principles of switch mode power conversion, analysis, design and control of dc-dc converters, PWM rectifiers and inverters, power management, power electronics applications in information technology, renewable energy systems, motion control and lighting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 |
| EEE | 473 | Electrical Machinery | Operating principles, modeling and speed control of DC, brushless DC, and AC machines; power converters for DC and AC motors drives. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 480 | Feedback Systems | Analysis and design of linear feedback systems. Frequency response and root locus techniques, series compensation, and state variable feedback. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 or MAE 318 with C or better |
| EEE | 481 | Computer-Controlled Systems | Implements computer-based, embedded, control systems using MATLAB xPC Target toolbox. Small-scale, representative projects demonstrate theoretical issues and provide hands-on expertise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 and EEE 230/CSE 230, or MAE 318 |
| EEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |
| EEE | 488 | Senior Design Laboratory I | Design process: research, concept, feasibility, simulation, specifications, benchmarking, and proposal generation. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; ENG 102, 105 or 108, EEE 241; EEE 334; EEE 350; three courses from the following list: EEE 304, 333, 335, 341, 352 or 360 |
| EEE | 489 | Senior Design Laboratory II | Implement, evaluate, and document EEE 488 design. Social, economic, and safety considerations. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE senior or post-bacc undergraduate student; EEE 488 |
| EEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 0-6 | L | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 433 |
| EEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-7 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |
| EEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | Prerequisite(s): Electrical Engineering BSE senior |
| EEE | 501 | Overview of Electrical Engineering | Electromagnetic fields, electrical circuit analysis, transmission lines, communications systems, electromagnetic interference and compatibility, computational techniques and electromagnetic software | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 505 | Time-Frequency Signal Processing | Joint time-frequency analysis of time-varying signals and systems; linear and quadratic time-frequency representations; applications in current areas of signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 506 | Digital Spectral Analysis | Principles and applications of digital spectral analysis, least squares, random sequences, parametric, and nonparametric methods for spectral estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 507 | Multidimensional Signal Processing | Processing and representation of multidimensional signals. Design of systems for processing multidimensional data. Introduces image and array processing issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 508 | Digital Image and Video Processing and Compression | Fundamentals of digital image perception, representation, processing, and compression. Emphasizes image coding techniques. Signals include still pictures and motion video. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 509 | DSP Algorithms and Software | Linear systems review, digital filter design, software aspects, DFT, FFT, random signals, programming aspects, applications projects, MATLAB and Java simulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 510 | Multimedia Signal Processing | Speech/audio coding algorithms. LPC, CELP, MPEG, Cell phone, DTV, cinema, and surround sound standards. MPEG/JPEG introduction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 511 | Artificial Neural Computation | Networks for computation, learning function representations from data, learning algorithms and analysis, function approximation and information representation by networks, applications in control systems and signal analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit for only MSE 518, EEE 518, MAE 518, MSE 475, or CHE 518 |
| EEE | 523 | Advanced Analog Integrated Circuits | Analysis and design of analog integrated circuits: analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 524 | Communication Transceiver Circuits Design | Communication transceivers and radio frequency system design; fundamentals of transceivers circuits; RF, IF, mixers, filters, frequency synthesizers, receivers, CAD tools, and lab work on IC design stations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 525 | VLSI Design | Analysis and design of Very Large Scale Integrated (VLSI) circuits. Physics of small devices, fabrication, regular structures, and system timing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 526 | VLSI Architectures | High throughput and low-power VLSI architectures for signal processing. Array processor systems; data path design and optimization; memory design; high-level synthesis; low-power design at system level, algorithm level, and architecture level. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 527 | Analog to Digital Converters | Detailed introduction to the design of Nyquist rate, CMOS analog to digital converters. Requires knowledge of analog integrated circuits (analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits) to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 528 | Introduction to Microelectromechanical Systems | Microelectromechanical systems and devices emphasizing analytical and numerical modeling of actuation and sensing mechanisms with an overview of fabrication technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 530 | Advanced Silicon Processing | Thin films, CVD, oxidation, diffusion, ion-implantation for VLSI, metallization, silicides, advanced lithography, dry etching, rapid thermal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 531 | Semiconductor Device Theory I | Transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 532 | Semiconductor Device Theory II | Advanced MOSFETs, charge-coupled devices, solar cells, photodetectors, light-emitting diodes, microwave devices, and modulation-doped structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 533 | Semiconductor Process/Device Simulation | Process simulation concepts, oxidation, ion implantation, diffusion, device simulation concepts, pn junctions, MOS devices, bipolar transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 534 | Semiconductor Transport | Carrier transport in semiconductors. Hall effect, high electric field, Boltzmann equation, correlation functions, and carrier-carrier interactions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 535 | Electron Transport in Nanostructures | Nanostructure physics and applications. 2-D electron systems, quantum wires and dots, ballistic transport, quantum interference, and single-electron tunneling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 536 | Semiconductor Characterization | Measurement techniques for semiconductor materials and devices. Electrical, optical, physical, and chemical characterization methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 537 | Semiconductor Optoelectronics | Electronic states in semiconductors, quantum theory of radiation, absorption processes, radiative processes, nonradiative processes, photoluminescence, and photonic devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 539 | Intro Solid-State Electronics | Crystal lattices, reciprocal lattices, quantum statistics, lattice dynamics, equilibrium, and nonequilibrium processes in semiconductors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 540 | Fast Computational Electromagnetics | Method of moments, finite difference time-domain, finite element methods implemented using fast algorithms (wavelets, FMM, Nystrom) to gain high efficiency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 541 | Electromagnetic Fields and Guided Waves | Polarization and magnetization; dielectric, conducting, anisotropic, and semiconducting media; duality, uniqueness, and image theory; plane wave functions, waveguides, resonators, and surface guided waves. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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|---------|-------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EEE | 543 | Antenna Analysis and Design | Impedances, broadband antennas, frequency independent antennas, miniaturization, aperture antennas, horns, reflectors, lens antennas, and continuous sources design techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 544 | High-Resolution Radar | Fundamentals; wideband coherent design, waveforms, and processing; stepped frequency; synthetic aperture radar (SAR); inverse synthetic aperture radar (ISAR); imaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 545 | Microwave Circuit Design | Analysis and design of microwave attenuators, in-phase and quadrature-phase power dividers, magic tees, directional couplers, phase shifters, DC blocks, and equalizers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 546 | Advanced Fiber Optics | Theory of propagation in fibers, couplers and connectors, distribution networks, modulation, noise and detection, system design, and fiber sensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 547 | Microwave Solid-State Circuit Design I | Applies semiconductor characteristics to practical design of microwave mixers, detectors, limiters, switches, attenuators, multipliers, phase shifters, and amplifiers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 548 | Coherent Optics | Diffraction, lenses, optical processing, holography, electro-optics, and lasers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 550 | Transform Theory and Applications | Introduces abstract integration, function spaces, and complex analysis in the context of integral transform theory. Applications to signal analysis, communication theory, and system theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 551 | Information Theory | Entropy and mutual information, source and channel coding theorems, applications for communication and signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 552 | Digital Communications | Complex signal theory, digital modulation, optimal coherent and incoherent receivers, channel codes, coded modulation, Viterbi algorithm. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 553 | Coding and Cryptography | Introduces algebra, block and convolutional codes, decoding algorithms, turbo codes, coded modulation, private and public key cryptography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 554 | Random Signal Theory | Applies statistical techniques to the representation and analysis of electrical signals and to communications systems analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 556 | Detection and Estimation Theory | Combines the classical techniques of statistical inference and the random process characterization of communication, radar, and other modern data processing systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 557 | Broadband Networks | Physics of wireless and optical communications. Broadband multiplexing and switching methods. Blocking and queuing analysis. Network optimization, routing, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 558 | Wireless Communications | Cellular systems, path loss, multipath fading channels, modulation and signaling for wireless, diversity, equalization coding, spread spectrum, TDMA/FDMA/CDMA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 559 | Wireless Networks | Design principles of cellular networks. Multiple access control protocols for wireless systems. Wireless routing and TCP/IP. Mobile management. Call admission control and resource allocation (e.g., power control and rate control). Wireless security. Future-generation wireless networks. A previous course in random signal theory is required to be successful in this class. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only CSE 591 (Wireless Networks), EEE 559 or 598 (Wireless Networks) |
| EEE | 562 | Nuclear Reactor Theory and Design | Principles of neutron chain reacting systems. Neutron diffusion and moderation. One-, two-, and multigroup diffusion equation solution methods. Heterogeneous reactors. Nuclear fuel steady-state performance. Core thermal-hydraulics. Core thermal design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 563 | Nuclear Reactor System Dynamics and Diagnostics | Time-dependent solution to neutron diffusion equation. Reactor kinetics and reactivity changes. Dynamics, stability, and control of reactor systems. Modeling neutronic and thermal processes. System characterization in time and frequency domains. Reactor surveillance and diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 564 | Interdisciplinary Nuclear Power Operations | Nuclear power plant systems. Studies interrelationship and propagation of effects that systems and design changes have on one another, especially in relation to nuclear power plant safety and operations. Case studies and design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 565 | Solar Cells | Introduction to the generation and utilization of electricity from solar energy. Exploration of the science and engineering of direct conversion (photovoltaics), including the design, fabrication, and operation of solar cells, and the construction and performance of solar cell modules. Prior knowledge of properties of electronic materials is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 571 | Power System Transients | Simple switching transients. Transient analysis by deduction. Damping of transients. Capacitor and reactor switching. Transient recovery voltage. Travelling waves on transmission lines. Lightning. Protection of equipment against transient overvoltages. Introduces computer analysis of transients. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 572 | Advanced Power Electronics | Analyzes device operation, including thyristors, gate-turn-off thyristors, and transistors. Design of rectifier and inverter circuits. Applications such as variable speed drives, HVDC, motor control, and uninterruptible power supplies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 573 | Electric Power Quality | Sinusoidal waveshape maintenance; study of momentary events, power system harmonics, instrumentation, filters, power conditioners, and other power quality enhancement methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 574 | Computer Solution of Power Systems | Algorithms for digital computation for the Newton and fast-decoupled power flow problem, and fault analysis. Sparse matrix and vector programming methods, creation of elimination trees, network equivalent, solution of the least squares problem, introduction to state estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 575 | Power System Stability | Dynamic performance of power systems with emphasis on stability. Modeling of system components and control equipment. Analysis of the dynamic behavior of the system in response to small and large disturbances. Knowledge of EEE470, 471 and 473 (or equivalents) is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 576 | Power System Dynamics | Dynamic performance of power systems with emphasis on control. Modeling of control equipment, FACTS devices, wind generators, and nonlinear loads. Design of power system stabilizers. Prior knowledge of electric power devices, power system analysis, and electrical machinery is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only EEE 576 or 598 (Power System Dynamics) |
| EEE | 577 | Power Engineering Operations and Planning | Economic dispatch, unit commitment, dynamic programming, power system planning and operation, control, generation modeling, AGC, and power production. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 579 | Power Transmission and Distribution | High-voltage transmission line electric design: conductors, corona, RI and TV noise, insulators, clearances. DC characteristic, feeders voltage drop, and capacitors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 581 | Filtering of Stochastic Processes | Modeling, estimation, and filtering of stochastic processes, with emphasis on the Kalman filter and its applications in signal processing and control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 582 | Linear System Theory | Controllability, observability, and realization theory for multivariable continuous time systems. Stabilization and asymptotic state estimation. Disturbance decoupling, noninteracting control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 586 | Nonlinear Control Systems | Stability theory, including phase-plane, describing function, Liapunov's method, and frequency domain criteria for continuous and discrete, nonlinear, and time-varying systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 587 | Optimal Control | Optimal control of systems. Calculus of variations, dynamic programming, linear quadratic regulator, numerical methods, and Pontryagin's principle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 588 | Design of Multivariable Control Systems | Practical tools for designing robust MIMO controllers. State feedback and estimation, model-based compensators, MIMO design methodologies, CAD, real-world applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 589 | Linear Algebra and Convex Optimization | Linear algebra and convex optimization. Vector spaces, matrix algebra, linear programming, Lagrange multipliers, Karush-Kuhn-Tucker (KKT) conditions, duality theory and algorithms for convex optimization. Newton's method, gradient and steepest descent methods. Algorithms for unconstrained, equality constrained and inequality constrained problems, which include interior point methods. Applications to approximation and data fitting and some geometric problems. Applications to signal processing, communications and control systems. Background in linear algebra necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit allowed for only EEE 589 or 598: Advanced Linear Algebra & Opt |
| EEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Master of Engineering or Electrical Engineering MS, MSE or PHD students |
| EEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 606 | Adaptive Signal Processing | Principles and applications of adaptive signal processing, adaptive linear combiner, Wiener least-squares solution, gradient search, performance surfaces, LMS/RLS algorithms, block time/frequency domain LMS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 607 | Speech Coding for Multimedia Communications | Speech and audio coding algorithms for applications in wireless communications and multimedia computing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 625 | Advanced VLSI Design | Practical industrial techniques, circuits, and architectures appropriate to high-performance and low-power digital VLSI designs such as microprocessors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 627 | Oversampling Sigma-Delta Data Converters | Introduces design and analysis of sigma delta oversampled data converters from an IC design perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 631 | Advanced Optoelectronics | Principles of heterojunctions and quantum well structures, band lineups, optical, and electrical properties. Introduces heterojunction devices. Knowledge of transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors. is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 641 | Advanced Electromagnetic Field Theory | Cylindrical wave functions, waveguides, and resonators; spherical wave functions and resonators; scattering from planar, cylindrical, and spherical surfaces; Green's functions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 643 | Advanced Topics in Electromagnetic Radiation | High-frequency asymptotic techniques, geometrical and physical theories of diffraction (GTD and PTD), moment method (MM), radar cross section (RCS) prediction, Fourier transforms in radiation, and synthesis methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 686 | Adaptive Control | Main topics covered: adaptive identification, convergence, parametric models, performance and robustness properties of adaptive controllers, persistence of excitation, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering MS, MSE, or PHD student or Master of Engineering student |
| EEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 731 | Advanced MOS Devices | Threshold voltage, subthreshold current, scaling, small geometry effects, hot electrons, and alternative structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering PhD students |
| EEE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EET | 406 | Control System Technology | Control system components, analysis of feedback control systems, stability, performance, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3-4 | | Pre-requisites: EST 310; MAT 266; Credit for EET 506 or EET 406 |
| EET | 408 | Digital Real-Time Control | Analysis, simulation, and design of discrete systems. Approach taken in this class begins with the analysis, simulation and design of a continuous system, which yields an s-based, transfer function compensator. Then, this compensator is transformed into a z-based transfer function, which can be realized with a difference equation in a microcontroller. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EET 406; Credit is allowed for only EET 408 or 494 (Digital Realtime Control) |
| EET | 430 | Instrumentation and Measurement Systems | Instrumentation and measurement techniques, sensors operating principles. Signal and error analysis. Signal conditioning and data acquisition. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only EET 430 or 530 |
| EET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EET | 506 | System Dynamics and Control | Time, frequency, and transform domain analysis of physical systems. Transfer function analysis of feedback control systems performance and stability. Compensation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 406 or EET 506 |
| EET | 508 | Digital Real-Time Control | Sample data control techniques and applications to process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EET | 530 | Electronic Test Systems and Applications | Analysis, design, and application of electronic test equipment, test systems, specifications, and documentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 430 or EET 530 |
| EET | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EGR | 101 | Foundations of Engineering Design Project I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only SER 101 or EGR 101 |
| EGR | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CADD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 101; MAT 170 or higher; Pre- or corequisite(s): ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| EGR | 103 | Introduction to Human Systems Engineering | Introduces basic principles, methods and theories of psychology and applications to engineering problems relevant to human systems. Gives particular attention to the intersection of psychology and engineering. Students learn brain anatomy and physiology, sensation and perception, cognition, social systems and research methods so that they are able to design systems consistent with human capabilities and limitations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | |
| EGR | 104 | Critical Inquiry in Engineering | Critical thinking. Systematic evaluation of information as input to well-informed decision making. Close reading and substantive writing in a technical setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): ENG 101, 105 or 107 |
| EGR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 201 | Use-Inspired Design Project I | Design, professionalism, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): APM 265, 270, MAT 265 or 270; EGR 102 |

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| EGR | 202 | Use-Inspired Design Project II | Design, problem solving, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 201 |
| EGR | 216 | Engineering Electrical Fundamentals | Introduces modeling of electrical systems using mathematical and scientific principles. Covers electrical circuit analysis techniques including Kirchhoff's and Ohm's laws, series and parallel circuit elements, equivalent elements and circuits, and nodal analysis. These techniques are developed for DC, AC, and transient conditions. Also introduces the basic structure of a modern electronic measurement system and relates this structure to measurement accuracy, precision and resolution. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MAT 265 or MAT 270. Credit is allowed for only EGR 216 or 294 Engineering Fundamentals I |
| EGR | 217 | Engineering Mechanics Fundamentals | Provides a foundation in the theory and principles of statics and dynamics. Examines the effect of forces acting on particles and rigid bodies. Vector mechanics is used extensively. Statics addresses the topics of equilibrium in two and three dimensions, to include distributed loads, trusses, frames, friction and cables. Dynamics addresses kinematics, including translating and rotating reference frames, and two-dimensional kinetics methods of force-acceleration, work-energy, and impulse-momentum. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: PHY 121. Credit is allowed for only EGR 217 or 294 Engineering Fundamentals II |
| EGR | 218 | Materials and Manufacturing Processes | Applies material properties and manufacturing processes to the design and fabrication of engineered artifacts. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): CHM 113 or 114. Credit is allowed for only EGR 218 or 294 Engineering Materials & Manufacturing |
| EGR | 219 | Computational Modeling of Engineering Systems | Introduces computing that develops software to find solutions to engineering problems. Students write and document code to solve problems in data acquisition, modeling of physical systems, and optimization. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EGR 219 or 294 Computational Modeling |
| EGR | 223 | Biology of Human Systems | Introduces the biological basis of human behavior and implications for human systems engineering. Structure and function of the nervous system as well as the behavioral effects of the physiological processes outside the brain (for example, hormones secreted by glands). Biological processes involved in many aspects of our behavior such as eating, sleeping, sexual behavior, emotional responses, sensory perception, learning and memory, language and cognitive functions, mental illness and drug abuses. Introduces a wide range of techniques and methods used to investigate the biological foundations of behavior. Prepares students for advanced courses in neuroscience, psychology or related fields. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 224 | Social Basis of Human Systems | Covers social behaviors, social cognition and emotion critical for engineered systems that interact with humans (artificial intelligence, robots). Students learn how human beings behave, think and feel in daily social situations and think about how that information can be used to create effective human systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 225 | Human Systems Integration | Reviews human systems integration (HSI), which is basically systems engineering from a human-centered perspective. Research, theory and methodological approach as applied to a variety of systems ranging from transportation systems to medical and military systems. Discusses handbook chapters and specific examples of human systems integration. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 230 | Human Systems and Statistics I | Basic methods of exploratory data analysis (including graphics) and statistical computing methods, including a detailed look at hypothesis testing, effect size and power analysis, as well as some methods for dealing with categorical and discrete data. Introduces both correlation/regression and analysis of variance (ANOVA), as well as common statistical software. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): EGR 103 or PSY 101 (or PGS 101) with C or better; MAT 119 or 171 or 265 with C or better |
| EGR | 240 | CADD and Solid Modeling | Uses 3-D solid modeling software to model mechanical parts and produce valid engineering drawings, including use of geometric dimensioning and tolerancing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EGR | 280 | Engineering Statistics | Applications-oriented introduction to statistics with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): APM 265, 270, MAT 265 or 270 |
| EGR | 290 | Experimental Research Methods in Human Systems Engineering | Introduces the basics of research methodology as applied in human systems engineering. Quantitative and experimental design from an applied perspective. Guided study of the process of conducting research within human systems engineering. Project topics range from research question generation and literature review to reporting of results. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 301 | Concentration Project I | Design, communication, and critical thinking developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MAT 267 or MAT 272 |
| EGR | 302 | Concentration Project II | Design, engineering practice, and communication developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 |
| EGR | 303 | Mechanical Systems Project I | Analyze, design, implement and characterize a mechanical system through an in-depth mechanical system design project. Project includes modeling, analysis and measurement of the dynamic behavior of the mechanical system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |

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| EGR | 304 | Electrical Systems Project I | Analyze, design, implement and debug an electrical or electromechanical system through an in-depth electrical system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 216, 219 |
| EGR | 305 | Robotics Systems Project I | Analyze, design, implement and debug a robotic electromechanical system through an in-depth robotic system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 216, 219 |
| EGR | 306 | Automotive Systems Project I | Analyze, design, implement and verify an automotive system through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 307 | Humanitarian Engineering Project I | Analyzes, designs, implements and characterizes an engineered system that addresses a humanitarian objective. Project includes modeling, analysis and measurement of the behavior of the system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217. Pre- or corequisite(s): EGR 321 |
| EGR | 308 | Manufacturing System Project I | Focuses on design for product realization in a manufacturing environment. Projects are industry driven and applicable to low-volume product development. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218 |
| EGR | 310 | Environmental Systems Project I | Analyze, design, implement and verify an engineered system that addresses an environmental objective through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217. Pre- or corequisite(s): EGR 321 |
| EGR | 312 | Environmental Systems Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses an environmental need in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of environmental engineering; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 310 |
| EGR | 313 | Mechanical Systems Project II | Applies design principles to conceptualize, implement and characterize a fluid and/or thermodynamic system in a project setting. Project emphasizes communication with project stakeholders; applying an appropriate design approach in the context of a fluid and/or thermodynamic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217, 218, 340 |
| EGR | 314 | Electrical Systems Project II | Applies design principles to conceptualize, implement and characterize an electrical or electromechanical system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an electrical system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 304, 330 (or EGR 333) |
| EGR | 315 | Robotic Systems Project II | Applies design principles to conceptualize, implement and characterize an electromechanical robotic system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of a robotic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 305, 455 |
| EGR | 316 | Automotive Systems Project II | Applies design principles to conceptualize, implement and characterize an automotive system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an automotive system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 306, 340 |
| EGR | 317 | Humanitarian Engineering Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses a humanitarian objective in a project setting. Project emphasizes communication with project stakeholders, applying an appropriate design approach, thinking critically in developing system specifications and evaluating a prototype relative to these specifications, and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 307; EGR 371 |
| EGR | 318 | Manufacturing Systems Project II | Focuses on process development for high-volume manufacturing in the competitive global economy. Uses discrete event simulation software to model and study the manufacturing environments. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 219; EGR 382 |

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| EGR | 320 | Human Systems and Statistics II | Statistical methods commonly used in human systems engineering research. Emphasizes (1) connecting research designs and statistical analysis, (2) interpreting and breaking down significant effects, (3) addressing practical problems associated with doing research in applied contexts, (4) using statistical methods to understand the connection between variables in a complex system, and (5) the use of statistical software. Primarily focuses on analysis of variance (ANOVA) but introduces other techniques (including mediation analysis, structural equation modeling and cluster analysis). Recommended for preparation for both graduate study and careers in related industry. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): EGR 230 or PSY 230 or PSY 231 |
| EGR | 321 | Water Resource Systems | Fundamentals of water supply and surface water hydrology in the context of the engineering, design and analysis of water resources systems. Places particular emphasis on those aspects of water systems that apply in the context of the developing world as well as in the context of environmentally sustainable systems. Course delivery is designed for engineering students with a broad understanding of engineering fundamentals but without specialist civil engineering knowledge. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219 |
| EGR | 322 | Cognition and Human Systems | Human cognition and how it bears on the design of technological and social systems. Although focuses on applications, requires student to delve into the basic literature that informs these applications and produce a literature review that draws on both applied and theoretical work. Many weeks involve a hands-on experience with a method or technique, and weekly quizzes emphasize critical thinking about these examples. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101; junior or senior standing |
| EGR | 323 | Perception and Human Systems | In-depth exploration of methods by which humans receive and interpret information from the world by vision, audition, taste, smell, touch and movement. Emphasizes the integration of behavioral and neural research with potential applications to engineering practice. Topics cover a wide range from the biological basis of sensory information processing to the behavioral aspects of perception, and to the applications of perceptual theories to disciplines like computer vision, display technologies, graphic design and sound processing. Solid foundation for further coursework and research in neuroscience or psychology; students also gain knowledge that could be useful in various professions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; junior or senior standing |
| EGR | 324 | Structural Design for Land Development | Covers essential structural engineering concepts including loads, materials, constraints, specifications, optimization, and the design environment; structural modeling, analysis, and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 221; EGR 222 |
| EGR | 325 | Water and Wastewater Treatment | Essential elements of aquatic chemistry, water pollution and water and wastewater treatment technologies. Provides a fundamental basis for understanding sustainable water and wastewater treatment processes and their design considerations. Includes critical evaluation of contemporary issues concerning our water environment and the associated regulatory framework to strengthen and emphasize importance of adequate practices used in operation and design of engineered water and wastewater treatment systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): CHM 113; EGR 321 |
| EGR | 330 | Design of Electrical Systems | Overview of electrical system architectures and components used in design of smart electrical and electromechanical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216; 219 |
| EGR | 333 | Distributed Circuits and Systems | Analysis and modeling of the generation and distribution of electrical signals and energy across distributed systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 334 | Analog-Digital Interface | Signal processing and operational tools that lie between sensors and digital data processors developed from a system perspective. Includes selection, deployment and analysis of sensors, analog signal processors and converters as well as their appropriate power supplies and the impact of all these components on system performance and cost. Uses experimental and simulation tools to demonstrate typical-use cases for medical, military, industrial and consumer applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 219 |
| EGR | 338 | Microcontrollers in Smart Systems | Microcontroller implementation of smart systems. Microcontrollers applied to control dynamic systems, including the interface with sensors and actuators as well as developing simple open- and closed-loop control laws. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 and 334 |
| EGR | 339 | Fabrication of Electrical Systems | Overview of electrical fabrication techniques; design cycle time, cost, quality, reliability, product life cycle, and testing; programmable versus hard-wired implementation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables. Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 121; APM 266, 271, MAT 266 or 271; Credit is allowed for only EGR or MET 340 |

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| EGR | 343 | Mechanics of Solid Materials | Studies strength and physical performance, such as deformations and load-carrying capacity, of natural and artificial solid structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217, 218 |
| EGR | 363 | Automotive Powertrains and Thermal Systems | Internal combustion engine (ICE) design in the context of automotive systems and heat management in vehicle systems, including thermal design of engine and transmission cooling systems. Operating characteristics and efficiencies of the ICE, terminology and abbreviations used in the automotive industry, contemporary fuels and the latest hybrid technology, CAFE standards and EPA vehicle emissions standards, lubrication systems and fluids appropriate for a given design, and current and future standards requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340 |
| EGR | 371 | Best Practices for Humanitarian Engineering | Technological and process-based best practices for engineering students to gain applied competence in low-cost and low-tech appropriate methods and technologies for small-scale technical problems in local and international humanitarian development contexts. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering major; junior or senior standing |
| EGR | 381 | Manufacturing Processes and Validation Lab | Theory of basic manufacturing processes accompanied by the fundamental skills; safety practices while working with engineering drawings, machine tools and metrology equipment related to manufacturing. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217, 218 |
| EGR | 382 | Modeling of Manufacturing Systems I | Modeling of manufacturing systems using discrete event simulation. Introduces basic manufacturing-related data and system configurations. Uses commercial simulation software to build and analyze model output data. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 219, 280 |
| EGR | 383 | Communications in a Production Environment | Effective communication is essential in all production environments for efficiency, yield and safety. Covers the major applications within a company and the expectations for the individual's capabilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202 (or EGR 240) |
| EGR | 385 | Design for Manufacturing | Introduces the methods employed to design and produce products that can compete in the global marketplace. Topics include design for manufacturability and assembly, product life-cycle, economics of design and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 |
| EGR | 386 | Integrated Circuit Manufacturing | Integrated circuit manufacturing combines judicious selection of materials with nano-meter features to create complex digital and analog circuits. The process demonstrates extreme applications of design, control and resource organization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216; EGR 280 |
| EGR | 387 | Industrial Automation | Introduces concepts and application of industrial automation systems. Topics include PLC control systems, embedded control systems, sensing technologies, robotics and material-handling systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 219 |
| EGR | 388 | Engineering Materials And Semiconductor Science | Semiconductor technology operates at the limits of our understanding of many sciences--materials, optics, mechanics, plasma chemistry and charge movement. As well as examining the concepts, considers how they interact within tight constraints and how this affects continuous production, future development options and trouble shooting. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: Engineering BSE or Manufacturing Engineering BS major; Junior standing |
| EGR | 390 | Qualitative Research Methods | Basics of qualitative research as it is implemented within the human systems engineering area. Covers methods of implementing core concepts such as validity and techniques of interviews; questionnaire and observation within various human system methodologies (e.g., cognitive task analysis, protocol analysis, and usability). All concepts taught with an applied focus with emphasis on how the methods can be implemented in real-world settings. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 290 or PSY 290 |
| EGR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 401 | Professional Design Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 302, 312, 313, 314, 315, 316, 317 or 318 |
| EGR | 402 | Professional Design Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 401 taken within one previous term |
| EGR | 422 | Human Medical Systems | Comprehensive introduction to human factors issues related to healthcare systems, medical training, and medical device design. Topics range from psychological and physiological aspects of human behavior like perceptual and cognitive functions, motor behavior, learning, motivation, physiology, and ergonomics to applied issues in the context of medicine and healthcare like human-computer interactions in medical information systems, the ergonomic design of medical devices, evaluation of medical device usability, team training in healthcare and the organization of medical environment. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 424 | Human Automation Interaction | Explores the application of human systems engineering to automation. Human-automation interaction in domains of cyber security, remotely piloted aircraft systems, synthetic teammates, and human-robot interaction. Reading and discussion related to current articles describing research, methodology and theory. | N | SEM | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EGR | 425 | Unit Treatment Technologies and Systems | Addresses fundamental concepts of unit treatment technologies and the scientific and engineering principles that govern the proper design, operation and management of these systems. Course is divided into two overlapping major categories of unit treatment technologies: air-pollution controls and soils/groundwater remediation. Enhances understanding of the unit treatment technologies by reviews of dimensional analysis, mass transport mechanisms, mass balances, modeling, kinetics and reactors. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 426 | Integrated Solid Waste Systems | Addresses the fundamental concepts of solid waste, pathways and transformation processes following the from cradle-to-grave approach. Follows the life of the solid waste from point of generation, reclamation and treatment to point of disposal. Emphasizes describing the present solid waste systems as an integrative set of functional units. Considers physical, chemical and biological transformations of the solid waste, together with the existing technologies and practices for management, treatment and disposal of the solid waste. Includes a specific overview of sustainable solid waste practices such as waste minimization, pollution prevention, reuse and reclamation, together with current domestic and foreign regulations. Addresses planning and design of solid waste operations and facilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 427 | Principles of Hazardous Waste and Materials | Trains future environmental engineers and professionals in fundamental hazardous waste and materials concepts. Addresses regulatory requirements; materials hazard communication; material safety concepts; types of hazardous waste/materials (chemical, radioactive, and infectious); risk assessment and routes of exposure; personal protective equipment; prudent practices; treatment; storage and disposal of hazardous waste/materials through the lens of the cradle-to-grave concept. Gains knowledge about the hazardous waste enforcement processes. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 428 | Judgment and Decision Making in Human Systems | Covers human judgment and decision making as it applies to the design of intelligent systems or decision aids, tools for augmenting human judgment, and understanding consumer decision making. Covers judgment and decision making approaches, theories, biases, heuristics with applications to engineered systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 429 | Product Design and Evaluation | Applies human systems engineering methods to product design and evaluation. Consumer behavior, consumer research methods, systems and design thinking, how to conduct interviews, observational research, contextual analysis, questionnaire design and analysis, opportunity identification, usability testing and creativity. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 430 | Design, Fabrication, and Architecture of Electronic Devices | Comprehensive introduction to the design, operation, production and application of the most common semiconductor devices and categories of integrated circuit. Demonstrates the close interaction among materials, semiconductor physics and circuit performance, especially in terms of the applications and economics of digital systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 431 | Power Management | Devices and techniques to supply and manage power in electrical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340; Credit is allowed for only EGR 432 or MET 432 |
| EGR | 433 | Transforms and Systems Modeling | State-space and transform-domain modeling and analysis of electrical and electromechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 217; MAT 274 or MAT 275. Pre-or corequisite(s): MAT 342 or MAT 343 |
| EGR | 444 | Engineering Design | Applies fundamentals of mechanics in analysis and synthesis of machine components and systems, with emphasis on stress and failure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: EGR 343 |
| EGR | 445 | Mechanical Engineering Systems | Design and modeling of multicomponent electromechanical systems. Applications of computers, controllers, electronics using system hardware and software development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 303 or EGR 313 |
| EGR | 455 | Robotic Systems I | Analysis and design of robotic systems focusing on kinematics, dynamics, coordinate transformations and modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219; Credit is allowed for only EGR 455 or EGR 394 (Robotics I) |
| EGR | 456 | Robotic Systems II | Design of robotic systems focusing on dynamics, modeling and controlling a robot. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 455 or EGR 394 (Robotics I). Credit is allowed for only EGR 456 or EGR 494 (Robotics II) |
| EGR | 463 | Vehicle Electrical Systems and Hybrid Systems | Basic theory and operation of hybrid electric drive systems of motor vehicles. Covers fundamentals of next generation electrification including: batteries technology, charging, power electronic operation. Emphasizes the principals of HEV energy management strategies and HEV modeling fundamentals. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 363 (or EGR 394 Intro to Concepts in Automotive Engineering) |

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| EGR | 465 | Ground Vehicle Dynamics | Basic understanding of vehicle dynamics principles and a sufficient knowledge to analyze vehicle dynamic performance and associated chassis system design concepts. Understanding of various dynamical equations of motion governing vehicle behavior as well as computer simulation. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 363 (or EGR 394 Intro to Concepts in Automotive Engineering) |
| EGR | 472 | Learning and Human Systems Engineering | Learning as applied within the human systems engineering area. Overview of the theoretical areas relevant to learning (behavioral, social cognitive, cognitive, emotion and motivation). Applies these perspectives to enhance the design of systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 476 | Energy Infrastructures | Comprehensive study of sustainable energy conversion systems. Students learn to quantify and measure the concepts of sustainability of energy resources within the framework of the laws of thermodynamics. Covers conventional energy sources for primary power (fossil fuels, nuclear and hydroelectric); their sustainability, resource level and environmental impact. Covers the science and technology of heat engines and direct conversion methods. Considers conservation and storage. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 340 |
| EGR | 480 | Advanced Statistical Approaches for Manufacturing | Applies experimental design and statistical process control in the manufacturing environment. Uses engineering statistical software to formulate and solve problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 280 |
| EGR | 481 | Enterprise Economics | All manufacturing is about cost. Considers the components of these costs and presents a number of mathematical tools and approaches for representing, understanding and making decisions based on them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 280 |
| EGR | 482 | Materials Science in Manufacturing | High-technology manufacturing combines and exploits the properties of a wide range of materials. Provides a science-based view of materials selection and optimization for product manufacturability and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisite(s): EGR 218 |
| EGR | 483 | Manufacturing Systems Operations | Introduces key factory management strategies, lean and six sigma philosophies, and global manufacturing supply chains. Software and computer model-based analysis and observation of factory and supply chain performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 382 |
| EGR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EGR | 485 | Engineering Internship | Experiential education. Local company oversees a student project experience at their facility. | N | PRA | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | Pre-requisite: EGR 302 |
| EGR | 486 | CNC Computer Programming | Theory and applications of NC languages using CAM software and CNC machine tools. Overview of advanced manufacturing processes including production CNC part programming ranging from current design to inspection standards. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 381 |
| EGR | 487 | Casting and Forming Processes | Theory and practice of metal casting processes and design of castings. Analysis of various forming processes to determine load requirements. Theory and practice of tooling design for stamping operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 |
| EGR | 488 | Plasma Processing | Plasma processing is widely used in advanced technology manufacturing. Combines the principles of chemistry, materials, RF power and control to demonstrate key applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 218, 280 |
| EGR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EGR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EGR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EGR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 520 | Engineering System Design and Analysis | Develops a technical strategy to translate a user's operational needs into a physical solution to comply with specifications and requirements. Presents an approach for organizing, analyzing, designing, developing, verifying and validating systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 525 | Lean Systems | Creates a framework and model of lean engineering and a methodology for applying lean practices to systems engineering as a basis for lean product development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|-------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------|
| EGR | 530 | Principles of Systems Engineering | Engineering is increasingly about complex systems. Addresses scale, scope and complexity increase that engineers need to consider to bring together technical and social issues in a highly integrated way as they design flexible, adaptable, robust systems that can be easily modified and reconfigured to satisfy changing requirements and new technological opportunities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 520 |
| EGR | 535 | Engineering Innovation and Entrepreneurship | Provides knowledge of innovation and entrepreneurship practices and experience in the application of engineering systems innovation within an entrepreneurial setting of driving a product or process to successful launch. Includes protection of intellectual property and contractual relations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 570 | Capstone Design | Comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. Small-group project designing, building, evaluating and analyzing components, assemblies and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 530 |
| EGR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 515 | Structured English Immersion (SEI) Methods | Addresses the role of language and culture in teaching, program types, and specific SEI strategies for teaching English Language Learners (ELLs). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 516 | Advanced SEI Methods for ELLs | More fully prepares teachers for linguistically diverse classrooms in which there are students learning through SEI methodology. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 501 | Environmental Life Sciences: Grand Challenge: Global Climate Change | Introduces first-year graduate students to a range of fields related to the Environmental Life Sciences graduate program. Co-instructed by an interdisciplinary faculty team, combines overview lectures and active discussion of current literature in the fields of inquiry. Culminates in synthetic collaborative research proposals on topics that foster transdisciplinary approaches to environmental life science questions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 502 | Environmental Life Sciences: Field Camp | Combines lecture, field, and laboratory components; provides opportunities to develop field skills relevant to current questions in environmental life science, and to carry out a wide range of observations and measurements in natural systems. Instructed by an interdisciplinary faculty team. Travel out of the country is required and students need to be in possession of a valid passport. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: ELS 501 |
| ELS | 535 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ELS 535 or SOS 535 |

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| ELS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| ELS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 501 | Sustainability Leadership Workshop I | Formally takes students into the four learning threads of the EMSL program and the ASU brand of sustainability. Hands-on collaboration and group time with peer cohort members, field trips and deep diving into discussion, and application of sustainability theories into real-world scenarios. Sustainability speakers and practitioners engage students in critical thought. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Executive Masters for Sustainability Leadership major |
| EMS | 502 | Global Context I | Leaders in any organization face an increasingly connected and transparent world where social and environmental issues must be weighed in everyday decisions. Explores iconic sustainability issues and trends and their impact on their organization, institutions, communities and stakeholders. Applies tools to identify the relevant risks and opportunities within their organizational context and investigates potential responses. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership or Master of Sustainability Leadership major; Corequisite(s): EMS 503; Pre- or corequisite(s): EMS 501 or SOS 501 |
| EMS | 503 | Strategic Sustainability I | Sustainability requires that strategic thinking reaches beyond traditional forms and horizons of strategic planning, such as forecasting and prediction, in order to deal with expanded planning dimensions, emerging "wicked problems" and to identify flexible platforms for success. Explores the interface between strategy and sustainability, developing a framework for strategic sustainability that underpins authentic and transparent strategic efforts. Students engage in mapping, planning and prioritizing methods, tools and techniques to identify and assess strategic opportunities. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership or Master of Sustainability Leadership major; Corequisite(s): EMS 502; Pre- or corequisite(s): EMS 501 or SOS 501 |
| EMS | 504 | Communications and Sustainability I | One of the greatest challenges for leadership in sustainability is multidisciplinary communications. Currently, sustainability itself lacks meaning and emotion, which leads to a lack of commitment and execution. Therefore, all future executives must be proficient communicators who can convey vision and human context to the organization's sustainability initiatives. Helps you survey your internal communications environment, understand students target audiences and their unique customer centricities and develops their voices through the use of proven story structure. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 505 |
| EMS | 505 | Sustainability Leadership I | The practice of leadership in sustainability requires leading in multidisciplinary roles across multiple scales of an organization. In many of today's organizations, leadership must identify, communicate and support novel organizational contexts as sustainability emerges. Enables students to meld powerful and traditional leadership skills while challenging the student's prior knowledge with multiple lens of leadership in a sustainability context. Students create a personal plan for their unique needs and personal growth toward sustainability leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 504 |

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| EMS | 506 | Global Context II | As material sustainability issues are identified and prioritized and as the organization applies sustainability as core success platform, the organization looks to mitigating risks outside of its control, shaping the risks it can control, and creating new opportunities and leveraging those identified in the process. Global context comes into focus not only in expanding resource relationships and concerns, but also across dimensions of time, responsibility, success and a growing need to engage with an ever-growing group of stakeholders and potential partners. Organizations and leaders must innovate and execute at all levels of the organization to match the evolving reality. Explores and applies global sustainability as a knowledge platform for ongoing success, organizational innovation and effective organizational leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505; Corerequisite(s): EMS 507 |
| EMS | 507 | Strategic Sustainability II | As sustainability becomes a core strategic goal of any organization, it impacts all aspects of the organization from informing risk and reward to the definitions and dimensions of innovation and overall success. Uses reframing, re-visioning and backcasting via a sustainability lens as constructs for introducing strategic sustainability across all aspects of an organization--both internally and externally. Applies various methods such as natural capitalism, design for sustainability/method of sustainable product design, Anderson method, cradle-to-cradle and framework for strategic sustainable development to develop flexible action platforms for sustainable enterprises. Students create a strategic vision, action plan for an organization, including critical external partnerships with communities and institutions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505. Corerequisite(s): EMS 506 |
| EMS | 508 | International Immersive | The international immersive experience takes place in a compelling location where all the challenges and opportunities of sustainability are in play. It is designed as a dynamic vehicle to make real-world connections to sustainability leaders, projects and communities, and is among the most memorable experiences of the program. Students "see" and "feel" sustainability from another country and culture's perspective and see the overlap and conflict to their own context. Extending one's professional network to other host countries and generating a reflective experience and analysis report are experiential learning artifacts that are generated from this experience. Collaborative teams work through a sustainability case study and present their solutions. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506, 507 |
| EMS | 509 | Communications and Sustainability II | Marketing and communication professionals in all industries are attempting to keep up with the rapidly expanding landscape of multichannel communications. This is especially true in sustainability, given that the Chief Sustainability Officer must understand and appreciate the modes of communications across all platforms, not just in the consumer market. Maps internal, external and target audiences/markets; strategizes channels to reach them with sustainability stories; and creates a multichannel communications plan that incorporates modes of engagement for all audiences. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506; EMS 507; Corequisite(s): EMS 510 |
| EMS | 510 | Sustainability Leadership II | As sustainability emerges as a core strategic platform for an organization, leadership and sustainability intertwine; leadership opportunities--and responsibilities--greatly expand; thus requiring innovation. Individual leadership and organizational leadership are asked to find opportunity via extended definitions of critical systems; value webs, increased roles for diverse internal and external partnerships, and the need to lead within increasingly complex and unpredictable global systems. Engage students to challenge their prior definitions of systems, responsibility and community from the perspective of sustainability and leadership and provides a toolbox for leading with sustainability as a fundamental success platform. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506; EMS 507; Corequisite(s): EMS 509 |
| EMS | 511 | Global Context III | Sustainability leaders help their organizations recognize when material issues require solutions that extend beyond their control or capabilities, and when to look for, participate in and potentially lead industry, cross-industry, regional or other collaborative approaches. Global sustainability context becomes an increasingly proactive concept where individual and organizational responsibility and success extends to a global scale. Organizations organize themselves as agents of change toward sustainability that aligns with more traditional organizational success. Students learn from successes and failures of current and past attempts and assess the implications for this change in leadership perspective to their organizational context. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 512 |

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| EMS | 512 | Strategic Sustainability III | Organizations that aim at sustainability come to recognize that they must be part of sustainable success on all scales, from local to global, from internal to external and for today and tomorrow. Tools such as resource plans, investment pathways, stakeholder engagement and policy influencers set the theatre for sustainability-oriented organization to challenge the status quo and advance agendas that embed both success and sustainability. Students apply their enhanced strategic sustainability skills to examine select case studies on international sustainability in corporate and nongovernmental agencies. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 511 |
| EMS | 513 | Communications and Sustainability III | Most stories of sustainability are driven and told with data as its central character. Unfortunately, data is nearly meaningless to our minds unless it is placed in an illuminating human context. The best chief sustainable storytellers bring meaning to data through the use of metaphor brought to life by thought-provoking narrative. Story grips the mind and propels people forward. Students develop proof of concepts for campaigns, expand social media presence and influence, create and record a 20-minute presentation in the style of a TedTALK, and become a leader in sustainable communications. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 514 |
| EMS | 514 | Sustainability Leadership III | Lasting, sustainable change fully takes hold once ownership and accountability extends well into the organization and community. Engages the student to identify and apply pathways to inspire, persuade and influence others to act toward a shared global vision. Future orientation, reframing organizations to be globally scalable and still be locally focused, leadership best practices for diverse, multinational, and international human talents and redefining success and growth using sustainability as a success lens are great tasks that sustainability leaders face. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 513 |
| EMS | 515 | Capstone I | Capstone project and gateway to starting innovative sustainability initiatives and thinking. Planning, components and deliverables of the capstone from the first in-person immersion in January. Students perform a proof of concept to show viability and applicability that serves as a springboard for postgraduation continuation of capstone project into their organizations; environments. The proof of concept also becomes the final component of the e-portfolio. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 513, 514 |
| EMS | 516 | Capstone II - Sustainability Leadership Workshop II | Develops a proof of concept based on project proposal and feasibility study. Requires a TED-style final project presentation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): EMS 515 |
| EMS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 201 | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 202 | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 204 | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 214 | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 218 | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 230 | Introduction to Film Studies | Introduces the style and cultural significance of feature films. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 243 | Introduction to Writing Family History | Interdisciplinary writing course on theories, methodologies, and issues in writing family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 244 | Introduction to Researching Family History | Introduces research methods in family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 245 | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 303 | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 311 | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 317 | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 320 | Medievalism in Modern Culture | Studies the representation of Medieval narratives, characters, themes, myths, and images in modern culture. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 335 | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 344 | Intermediate Family History Research | How to locate records, analyze and interpret evidence, and write a family history narrative. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 345 | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Pre-requisite: completed ENG 102, or 105, or 108 with a grade of C or better; or be currently enrolled in ENG 102, 105, or 108. May not enroll in ENG 363 if you have credit in TCL 363 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 366 | Literature on Film | Studies literary texts and their adaptation to film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 367 | Environmental Issues in Literature and Film | Evaluates literary texts and films that address interconnected cultural, historical, and environmental issues. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 368 | Art of the Personal Essay | Writing personal essays drawing on both research and personal experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 373 | Publishing in Literary Magazines | Analyzes the history, publishing preferences, editorial staff, and submission guidelines of literary magazines. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 375 | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 376 | Writing a Personal History | Interdisciplinary writing course emphasizing theories, methodologies, and issues of composing personal histories. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 377 | Editing Family History for Public Audiences | Fundamentals of editing family writing. Role of editors in analyzing, revising, and polishing manuscripts for publication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 378 | Environmental Creative Nonfiction | Lectures, discussion, and criticism concerning the literary history of nature writing and techniques of writing environmental creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 379 | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 382 | Digital Project Management for Humanities | Introduces Web design for the humanities; explores the use of the ADDIE process to create digital projects. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 383 | Digital Media in the Humanities | Introduction to the digital arts is an introduction to the emerging "new media" with emphasis on still imaging, audio, video, multimedia and the World Wide Web. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 411 | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | 412 | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 464 | Great Directors | Studies the work of one or more influential directors. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 466 | Studies in International Film | Studies non-American narrative film. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 467 | American Film Musicals | A cultural history of American film musicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 468 | Environmental Literary Criticism | Evaluates the disparate critical practices that constitute what is the emerging literary project known as "ecocriticism" or "environmental literary criticism." | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 483 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 583 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 201 | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 202 | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 204 | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 205 | Introduction to Writing, Rhetorics and Literacies | How do we understand the ways in which people in systems--both small and large--social, political, and economic, throughout the world use language and other symbolic resources to carry out work? Three fields of study take this kind of questioning especially seriously: studies in writing, studies in rhetoric, and studies in literacy. Inquiry--that persistent, deliberate commitment to question and to build methods sufficient to that questioning--is a generative force in each of these fields of study. Familiarizes students with such questioning traditions and to help them judge for themselves what each is good for. The goal is to strengthen your own repertoire and decision-making power for producing and circulating work (widely defined across material, print, and digital media) that matters in our risk-ridden world. Quite simply, then, this is a course in asking good questions and in evaluating responses to situations that spur questioning. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 213 | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 214 | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity, narrative analyses of self and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 218 | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 245 | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student; ENG 102, 105 or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 302 | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 303 | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 307 | Writing Science Fiction | Writing science fiction, primarily the short story. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 312 | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 313 | Phonology and Morphology | Introduces English morphology, phonology, etymology, and phonetic aspects of rhyme, alliteration, and other sound-based literary devices. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 315 | Medieval Literature in Translation | Medieval literature (insular and continental) in translation, from Beowulf to Malory (excluding Chaucer), emphasizing cultural and intellectual backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| ENG | 320 | Medievalism in Modern Culture | Studies the representation of Medieval narratives, characters, themes, myths, and images in modern culture. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 325 | Restoration and the 18th Century | Writers and movements in nondramatic literature of the restoration and early 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 326 | English Drama 1660-1800 | English drama 1660-1800. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 330 | 19th-Century British Poetry | Romantic and Victorian poets studied in context. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 331 | American Drama | Major works in the development of American drama from its beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 335 | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 338 | Protest Literature | Examines traditions of social protest literature across a variety of historical periods and literary and rhetorical genres. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, ENG 105, or ENG 108 with C or better; minimum 24 earned hours; credit is allowed for ENG 394 (Banned Literature), 338 or 440 (American Protest Novels) |
| ENG | 342 | 20th-Century British and Irish Literature | Major works in the development of literature since 1900, studied in their historical and cultural contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 345 | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 355 | European Dramatic Traditions | Development of European drama since Aeschylus. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 356 | The Bible as Literature | Readings in the Jewish and Christian Scriptures in modern translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 360 | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Pre-requisite: completed ENG 102, or 105, or 108 with a grade of C or better; or be currently enrolled in ENG 102, 105, or 108. May not enroll in ENG 363 if you have credit in TCL 363 |
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 367 | Environmental Issues in Literature and Film | Evaluates literary texts and films that address interconnected cultural, historical, and environmental issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 369 | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 370 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; must have 35 or more earned hours; credit is allowed for only BIO 315 or ENG 370 |
| ENG | 371 | Rhetoric of the Environmental Movement | Examines how language is used to conceptualize, clarify/obfuscate, and resolve problems among those who concern themselves with the disposition of natural resources. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 372 | Document Production | Introduces document design and production. Practice in critique and in writing the content of publications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 374 | Technical Editing | Fundamentals of editing technical and professional materials. Role of editors in analyzing, revising, and polishing manuscripts. Successful writer-editor dialogues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 378 | Environmental Creative Nonfiction | Lectures, discussion, and criticism concerning the literary history of nature writing and techniques of writing environmental creative nonfiction for publication. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 385 | Career Development for English Majors | Theoretical and practical aspects of career planning related to skills and interests developed in English studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 390 | Methods of Inquiry | Studies in writing, rhetoric and literacy are multiple and diverse because these areas deal with complicated ways people create meaning, circulate meaning, and understand meaning in a variety of contexts and a variety of modal formats. Examines ways of developing research problems and questions, designing studies and conducting, reading and evaluating research in the areas of writing, rhetoric and literacy. Qualitative methods (e.g., case study, ethnographic methods, interviewing); historical methods (e.g., archival, document analysis and artifact interpretation); rhetorical analysis and discourse analysis; feminist approaches to research and analysis; and recent advances in research in the fields of rhetoric, writing and literacy studies. Investigates the many attitudes and assumptions about creativity and cultural work that make methods of inquiry as controversial as they are significant to contemporary public life. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 391 | Writing in Context | How do we understand the ways in which people use written language to carry out work in professional, academic, social and/or personal contexts? How does our understanding of the ways writing is produced for an audience shift between and among these different contexts? More importantly, how do writers adapt their writing practices in order to facilitate audience understanding as well as cultivate an audience's capacity for action? Familiarize students with rhetorical practices that position them to read, assess and respond to the rhetorical demands of a wide range of writing contexts. Strengthens students' existing rhetorical skill sets and problem-solving capacities for producing and circulating work (widely defined across material, print and digital media) that responds to a range of problems in an applied manner. Assesses the rhetorical demands of writing contexts and in developing and producing tailored, audience-specific texts that forward work in complex, interdisciplinary environments. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 392 | History of Rhetorical Theory | Begins in ancient Greece with the rise of the art of public oratory (known as rhetoric) and ends in the present, an era dominated by mass media. Engages in a great deal of reading—lots of very old writings as well as some newer ones. Covers a great many topics and ideas; focuses by continually returning to the subject of public discourse. Challenging readings designed to emphasize the connection between systems of philosophy (or "worldview") and systems of communication. By focusing on big ideas, students become a better thinker and communicator in any chosen career. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 393 | Theories of Literacy | While theories of literacy have, for the most part, been determined by the primacy of reading and writing script, more recent scholarship in literacy theory and history has served to challenge such limitations. Many contemporary perspectives on literacy view scripted text as one component of complex acts and practices of written communication that occur in social contexts. Studies that examine such communicative acts in their local contexts reveal that literate practices and the texts that are produced are imbued with social and cultural values and traditions and the needs and desires of individuals. As the statements above illustrate, theories of literacy themselves are embedded within the values and assumptions of individuals, institutions, and academic specialization. Examines some of these theories, their influences on academic scholarship and pedagogy, the ideological assumptions that inform them, and how we might view these theories within broader social-cultural landscapes. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 400 | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |
| ENG | 401 | Topics in Critical Theory | Major critical schools of recent decades—postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 403 | Semantics | Program and methods of contemporary formal semantics. Characterizes knowledge of meaning as knowledge of truth conditions. The goal of semantics is thus to uncover the rules that allow the speakers of a language to know under what conditions any sentence is true; or in other words, to construct a theory of truth for natural language. Simple fragments including: predication, quantification, definite descriptions, simple temporal and modal expressions, and attitude verbs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 314 with C or better; Credit is allowed for only ENG 403 or ENG 414 |
| ENG | 404 | Studies in Second Language Acquisition | Specialized topics in second language teaching and learning, including theory, pedagogy, curriculum, and assessment. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |
| ENG | 411 | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | 412 | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | 413 | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | 414 | Studies in Linguistics | Specialized topics in linguistics including phonology, syntax, semantics, pragmatics, discourse, language variation, and change. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |

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| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 416 | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Troilus and Criseyde. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | 418 | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 421 | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 422 | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 423 | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 424 | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 425 | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 426 | British Culture and Empire | Examines British imperial culture in art and literature, 1870-1914, and postcolonial theory. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: One course in ARS, ENG, or HST at 200 level or higher with B or better |
| ENG | 427 | Studies in 18th-Century Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 428 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ENG | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| ENG | 430 | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 433 | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 434 | Studies in the Literature and Culture of the Americas | Literature and culture of North America, South America, and the Caribbean. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 435 | Literatures and Cultures of Immigration and Diaspora | Specialized topics in literary and cultural representations of immigration and diaspora studied in an interdisciplinary context. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: A 200-level ENG course with C or better; Minimum 56 hours |
| ENG | 436 | Studies in Anglophone Literature and Culture | Literary, social, and cultural issues of English-speaking former colonial territories. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 440 | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 442 | Studies in 20th-Century British and Irish Literature and Culture | Major literary genres (novel, poetry, and drama) in their cultural and historical contexts. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 444 | Studies in American Romanticism | Fiction, poetry, and essays of such 19th-century authors as Hawthorne, Emerson, Melville, Thoreau, Fuller, Whitman, and Dickinson. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 445 | Studies in American Realism | Writers and influences that shaped the development of literary realism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 447 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| ENG | 448 | Studies in Irish Literature and Culture | Themes and problems pertaining to Irish literature, film, and social and cultural history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 452 | Studies in the Novel | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 453 | Studies in the American Novel | Poetics and politics of the novel, 18th through 21st centuries. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 455 | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 457 | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 458 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| ENG | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 461 | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 465 | Studies in Film | Advanced topics in cinema. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 468 | Environmental Literary Criticism | Evaluates the disparate critical practices that constitute what is the emerging literary project known as "ecocriticism" or "environmental literary criticism." | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 469 | Science and Literature | Historical and theoretical links between science and literature, from Francis Bacon to the present, examined in cultural context. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 470 | Symbols and Archetypes in Children's Literature | Various critical approaches and recurring themes studied in relation to classical and contemporary children's literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 474 | Review Writing | Advanced writing course exploring rhetorical approaches to writing reviews. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Completed ENG 102, 105, or 108 with C or better. Minimum 56 hours |
| ENG | 475 | Popular Periodical Writing | Advanced writing course analyzing and imitating genres in popular periodical writing. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: Completed ENG 102, 105, or 108 with C or better. Minimum 56 hours |
| ENG | 476 | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 478 | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 479 | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 485 | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better |
| ENG | 486 | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) |
| ENG | 487 | Advanced Creative Writing Workshop in Poetry | Advanced writing of poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 387 (Poetry) with C or better; Credit is allowed for only ENG 411 (Poetry) or 487 |
| ENG | 488 | Advanced Creative Writing Workshop in Fiction | Advanced writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 388 (Fiction) with C or better; Credit is allowed for only ENG 411 (Fiction) or 488 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 489 | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: BA in English (Secondary Education) major, ENG 102 (or 105 or 108) and one other ENG course |
| ENG | 490 | Literary Forms: Theory and Practice in Poetry | Types, history, analysis of traditional forms, and contemporary adaptations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 487 (Poetry) with C or better; Credit is allowed for only ENG 490 or 495 (Poetry) |
| ENG | 491 | Literary Forms: Theory and Practice in Fiction | Types, history, analysis of traditional forms, and contemporary adaptations. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 488 (Fiction) with C or better; Credit is allowed for ENG 491 or 495 (Fiction) |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 501 | Approaches to Research | Theories, methods and/or methodologies as well as qualitative and/or quantitative approaches to the specific discipline. Familiarizes students with the areas of research. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 501 or LIN 501 |
| ENG | 502 | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 504 | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 506 | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 507 | Methods and Issues in Teaching Composition | Up-to-date theory, practice, and implementation of secondary writing instruction | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Credit is allowed for only ENG 480 or 507 |
| ENG | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional contexts as well as the characteristics of different types of students and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| ENG | 530 | Old English | Study of Old English grammar, syntax, and phonology, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 531 | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 532 | Middle English Dialects | Study of the principal dialects of Middle English, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 533 | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 534 | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 535 | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 536 | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 537 | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 538 | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 539 | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 540 | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student: degree or non degree; Students who have credit for ENG 471 may not enroll in ENG 540 |
| ENG | 542 | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 544 | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 550 | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 551 | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 552 | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 553 | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 554 | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 556 | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |
| ENG | 560 | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 561 | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 562 | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 563 | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 597 | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 602 | Advanced Studies in Theory and/or Criticism | Seminar courses on the principles, strategies, and applications of critical, cultural, and/or literary theory and/or criticism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 603 | Advanced Studies in Comparative Literature | Seminar courses on the problems, methods, and principles of comparative analysis. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 604 | Interdisciplinary Cultural Studies | Seminar courses on work from literature, anthropology, and/or other disciplines, with an emphasis on cultural influences and functions. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 606 | Advanced Studies in English Education | Current research, issues, and trends in English education. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing—an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ENG or LIN 625 |
| ENG | 632 | Advanced Studies in Medieval and Renaissance Literature and Culture | Seminar in works of the Medieval or Renaissance periods, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 635 | Advanced Studies in British Literature | Seminar courses on works produced in or about England, Scotland, and Wales, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 636 | Advanced Studies in American Literature | Seminar courses on works produced in or about the United States, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 639 | Advanced Studies in Modernism and Postmodernism | Seminar courses on topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 642 | Advanced Studies in Ethnic, Anglophone, or Post-Colonial Literatures | Seminar courses that consider the influence of cultural or geopolitical developments on the production and circulation of texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 651 | Advanced Studies in History and Theories of Rhetoric | Selected topics in the history and/or theory of rhetoric. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 652 | Advanced Composition Studies | Selected topics on particular composition theories, practices, pedagogies, and figures. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 654 | Advanced Studies in Rhetoric, Writing, Technology, and Culture | Advanced study of theoretical, methodological, and pedagogical issues concerning the interrelationships among rhetoric, culture, writing, and writing technologies. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to linguistics and applied linguistics. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 655 or LIN 655 |
| ENG | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 662 | Poetic Genres | Creative writing courses in the long poem, the erotic image, death and transfiguration, reading and influence, and others. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 664 | Mixed Genres | Creative writing courses in the prose poem, magical realism, the literature of obsession. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 665 | Creative Methods | Creative writing courses in theory of the novel, poetics, story into film, and others. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 667 | Issues in the Writing Professions | Focuses on career preparation, resources, the role of writing in the community, creative writing, and the Internet. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or VAC 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 207 | Elements of English Language and Cultures I | English communication and cultural awareness for international users of English. Relies on the many contexts of English use around the world to teach aspects of grammar, reading, writing, listening and speaking. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 107; ENG 108 |
| ENG | 208 | Elements of English Language and Cultures II | English communication and cultural awareness for international users of English. Relies on the many contexts of English use around the world to teach aspects of grammar, reading, writing, listening and speaking. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 107 with C or better; ENG 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 213 | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 219 | Newspaper Production | Students work on campus newspaper to learn basics of news and column writing, digital photography, and layout. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 228 | Introduction to Shakespeare | | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 228 or 294 (Shakespeare for Teachers) OR (Introduction to Shakespeare) |
| ENG | 229 | Love and Lust in Medieval Literature | The medieval period, roughly 600-1500, cannot reasonably be called the "dark ages." Indeed, the Middle Ages provides us with a corpus of literature replete with complex characters struggling to live and love, dealing with sin and lust, unity and diversity, faith and reason within a tumultuous cultural milieu and religious rigor, all of which are feeling the winds of changes. Explores medieval literature, noting the astonishing differences from our own time, as well as surprising similarities. Western civilization, our own 21st century, for better or for worse, is indebted to the love and lust of the medievals. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 229 or 294 (Love and Lust in Medieval Lit) |

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| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 302 | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 305 | Classical and Biblical Backgrounds to Literature | Selected readings from the Bible and Greek and Latin literature in translation, emphasizing ideas, forms, and myths related to the development of English literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 311 | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 312 | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 317 | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 323 | Rhetoric and Grammar | Practical course taught in the computer lab. Emphasizes rhetorical strategies and grammar for writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 360 | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 361 | Scriptwriting | The art of scriptwriting using 10-minute plays as the platform. Designed to help students learn craft techniques and to expose them to the various forms of the 10-minute script. Includes lectures, writing assignments, discussion, and criticism. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): first-year composition; credit is allowed for only ENG 361 or 394 (Scriptwriting) |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisite: completed ENG 102, or 105, or 108 with a grade of C or better; or be currently enrolled in ENG 102, 105, or 108. May not enroll in ENG 363 if you have credit in TCL 363 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 369 | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 375 | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 379 | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 386 | American Gothic | The development of modern American Gothic as a literary form from Poe to Oates. Emphasizes the short story. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 400 | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |
| ENG | 401 | Topics in Critical Theory | Major critical schools of recent decades--postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 410 | Writing for Publication | Lectures and conferences concerning techniques of writing for publication. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 and one 200-level literature course with C or better, OR New College undergraduate student with minimum 45 hours |
| ENG | 413 | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites:ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 416 | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Troilus and Criseyde. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | 418 | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| ENG | 421 | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 422 | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 423 | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 424 | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 425 | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 430 | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 431 | Whitman and Dickinson | Evaluates the 19th-century American Literary Renaissance through the specialized examination of its poetry and authors in their historical context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 432 | The American Renaissance | Novels, poetry, short fiction, and criticism of the major literary figures of the early to mid-nineteenth century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 433 | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 437 | The American Novel, 1900 - 1960 | Developments in theory and practice of major novelists. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 438 | American Novel Since 1960 | Major novelists of the period. Developments in theory and practice. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 440 | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 450 | The British Novel | Focuses on the British novel from the 18th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 454 | Gender and Literature | Focuses on the representation of gender in literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 455 | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 457 | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 460 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Hispanic, and Asian American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 460 or WST 467 |
| ENG | 461 | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 462 | Africana Literature | Focuses on the literature of the African Diaspora, including texts from the Caribbean, the Americas, and Africa. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 463 | African American Literature | Thematic and cultural study of African American literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s) with C or better: ENG 200; one 200-level lit course OR Letters and Sciences undergrad; minimum 56 hours; one 200-level (or higher) English course OR New College undergrad; minimum 45 hours; Credit is allowed for only ENG 471 or 540 |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 476 | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 477 | World Literature | Readings in world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |
| ENG | 478 | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 479 | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 485 | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major, ENG 102 (or 105 or 108) and one other ENG course with C or better |
| ENG | 486 | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major, ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) |
| ENG | 489 | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA in English (Secondary Education) major, ENG 102 (or 105 or 108) and one other ENG course |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 502 | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 504 | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 506 | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| ENG | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 531 | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 533 | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 534 | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 535 | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 536 | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 537 | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 538 | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 539 | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 540 | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Graduate student: degree or non degree; Students who have credit for ENG 471 may not enroll in ENG 540 |
| ENG | 542 | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 544 | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 550 | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 551 | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 552 | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 553 | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 554 | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 556 | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 560 | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 561 | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 562 | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 563 | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 581 | Methods of Teaching Secondary Writing | Emphasizes methods of planning, teaching, and assessing appropriate content in the instruction of composition and related skills in secondary classrooms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only ENG 481 or 581 |
| ENG | 582 | Pedagogy | Overview of diverse theories of English instruction, including composition/rhetoric, linguistics and literary, with emphasis upon development and implementation for high school- and community college-level instructors. | N | SEM | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): admission to any graduate program |
| ENG | 583 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ENG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 597 | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| ENG | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ENV | 201 | Fundamentals of Environmental Science | Examines the functioning of the earth system and how it has changed over long and short time scales. Emphasizes understanding global processes and how human activities can disrupt these processes, changing the ability of our global environment to support life. Also emphasizes important feedbacks between biological and physical processes and their effects on the biosphere. Discusses the response of natural and managed ecosystems to global change along with prospects for the future. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 and 182 with C or better; CHM 116 with C or better |
| ENV | 310 | Soil Science | Fundamental principles of soil science, including physical, chemical, biological and ecological properties. Applies these principles to explain the importance of soil as both a natural resource and ecosystem. Discusses the role of soils as the heart of terrestrial ecosystems, both natural and managed, and the importance of this key natural resource to environmental health and biological productivity. Explores how human activity and global change are impacting this vital natural resource and ecosystem that is crucial to life on earth. The laboratory component also introduces applications and standard methodology for investigating these principles. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisite(s): BIO 320 with C or better; CHM 116 with C or better; PHY 101 or higher with C or better |
| EPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 532 | Becoming an Informed Consumer of Educational Research | Development of critical analyses skills in the examination and synthesis of educational research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: EPA 555 |
| EPA | 555 | Translating Research for Educational Change | Teaches educators how to translate research to promote educational change in their schools and districts. Three concepts emerge to empower practitioners to translate research to their individual schools and communities: (1) a needs assessment to understand the context (student population, community, networks); (2) an emphasis on the generalizability of research to provide an understanding of which findings are most applicable to specific contexts at which times and under which conditions; and (3) explicit training on ways of knowing to encourage practitioners to develop their own theoretical perspectives and test them against the academic research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 556 | Data Analysis for Education Decision Makers | Prepares educators to use the sources of information (i.e., results, reports and interactive programs) at their disposal to make educational decisions. Dynamic content is adapted based on the real-world information sources brought forth by the course participants. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 559 | Systematic Inquiry for Problem Solving | Trains participants to produce a policy analysis aimed at addressing a problem they identify within their own organizations. Participants identify a problem, gather, analyze data and evidence to draw conclusions, and clearly and succinctly report their findings and recommendations to policymakers. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EPA | 565 | Critical Topics in Education Policy | Critical topics in contemporary educational policy debates in the USA. Explores the dominant ideological and theoretical perspectives about what should be the purposes of schooling. Students analyze the humanist, core-curriculum, vocational, pragmatic as well as the standards-based, market-driven, professionally led, and networked models of reform, theories of change, implementation challenges, and the critiques leveled against these approaches. Students analyze critical topics such as policy formation, leadership, teachers unions, academic performance and community involvement. Encourages students to learn critical "policy skills" and reach reflexive and research-based conclusions about what are the requirements to develop "good school systems" and what their individual and collective contributions could be. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |
| EPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 795 | Continuing Registration | | N | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EPD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Pre-requisite: EPD 710, 712 or 714 with C or better |
| EPD | 710 | Current Research in Design | Review and critical evaluation of contemporary literature and research in design, environment and the arts. | N | SEM | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisite: Design, Environment and the Arts PhD OR Design, Environment and the Arts (Digital Culture in Design) PhD OR Environmental Design and Planning PhD OR Environmental Design and Planning (Healthcare and Healing Environments) PhD |
| EPD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 301 | Environmental Management | Focuses on knowledge and skills necessary to manage environmental programs. Perspectives include regulatory, individual, corporate, and consulting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 302 | Water and Wastewater Treatment Technology | Explores the development of treatment technologies. Addresses regulatory standards. Emphasizes theory and practice of system design, lab analysis standards and procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101; MAT 170, or MAT 210 |
| ERM | 303 | Environmental Regulations | Explores environmental laws, regulations, and directives. Addresses air, land, and water. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 364 | Toxicology and Biohazards in Emergency Management | Introduces poisons. Dose response routes of exposure and toxicokinetics. Diseases associated with natural disasters. Clinical presentation of treatments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 401 | Hazardous Waste Management | Definition of hazardous waste, RCRA and CERCLA regulations, hazardous waste classification system. Overview of hazardous waste management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |

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| ERM | 402 | Unit Treatment Technologies | Addresses various treatment technologies for contaminated air, water, and soil. Emphasizes design based upon medium, type of contamination, and concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): CHM 101 (or 113); MAT 170 or higher |
| ERM | 406 | Environmental Chemistry | Examines reactions, transport, and fates of hazardous chemicals in water, soil, air, and living organisms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101 (or 113) and MAT 170 or higher |
| ERM | 407 | Occupational Hygiene | Overview of occupational health hazards, including recognition, evaluation, and control. Includes regulatory status and health standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 426 | Environmental Issues | Explores the science and policy implications of contemporary problems that threaten the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 428 | International Environmental Management | Emphasizes technological and economic pressures experienced by developing countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | |
| ERM | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only ETM 480, GIT 480 or TMC 480 |
| ERM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| ERM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | |
| ERM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 501 | Principles of Hazardous Materials and Waste Management | Foundation for courses in curriculum. Topics include definitions of toxic and hazardous substances and wastes, RCRA classification, and OSHA criteria. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 502 | Regulatory Framework for Toxic and Hazardous Substances | Examines federal, state, and local regulations for hazardous materials and wastes. Includes history and trends in regulatory development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 503 | Principles of Toxicology | Interaction of chemicals with life and environment. Mechanisms of toxic action, dose-response relationships, toxicity testing models, predictive toxicology, and epidemiology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 506 | Chemistry of Hazardous Materials | Chemistry and toxicology of hazardous chemicals. Topics include proper handling, storage, transportation, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 507 | Industrial Hygiene | Emphasizes chemical hazards in industrial settings. Topics include recognizing and measuring hazards, control techniques, and regulatory standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 520 | Sustainability and Sustainable Development | Explores broad field of environmental sustainability with U.S. and international coverage of green living practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 522 | Air Pollution and Toxic Chemicals | Examines issues in the measurement analysis and control of toxic chemicals in air pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 523 | Soils and Groundwater Contamination | Theoretical and practical hydrogeology as it applies to cleaning up contamination. Investigative techniques, monitoring, risk assumptions, and assessment methodology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 527 | Environmental/Resources Regulations Concepts | Develops environmental regulations from common law to statutory requirements. Emphasizes Superfund, hazardous materials, toxics, and liability contracts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 528 | International Environmental Management | Studies environmental issues and laws outside the U.S., impact of free trade, and multinational corporations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 540 | International Environmental Law and Policy | Studies international environmental agreements, enforcement mechanisms, and the role of NGOs and international organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ERM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 501 | Social Theory and the Environment | Investigates key conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 502 | Political Ecology: Theory and Research | Investigates key theories and research of political ecology through the conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 510 | Urban Environments | Investigates major issues and themes on the urban environment, from urban sprawl to environmental justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 513 | Institutions | Studies formal and informal institutional arrangements for the governance of natural resources using case studies, experiments, and formal models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only AML, ESS or SOS 540 |
| ESS | 577 | Interdisciplinary Writing Seminar | If you want your work to make a difference in the world, you need to be able to communicate your ideas to diverse audiences in a way that is interesting and accessible. Teaches students to write clearly, persuasively and ethically to people in their disciplines, in other disciplines, and outside academia. Approaches writing as a way to think critically and refine ideas, as well as to communicate them to others. | N | SEM | Y | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is only allowed for ESS 577 or SOS 577 or SOS 598 (Interdisciplinary Writing) or SOS 598 (Writing Seminar) |
| ESS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ESS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EST | 115 | Digital Systems I | Introduces digital electronics. Topics include number systems and codes used in digital systems, Boolean algebra, logic gates, logic families, and combinational and memory circuits. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EST | 160 | Introduction to Electronic Systems | Introduces the components, devices, and practical design principles that are used to create competitive electronic systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EST 160 or 194 (Intro to Electronic Systems) |
| EST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 200 | Project Lab | Provides theoretical and practical overview of principles of measuring instruments and the main objective is to build good lab disciplines. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | Pre-requisites: Sophomore standing |
| EST | 210 | Circuit Analysis I | Parallel/Series circuits, ohm's law, network theorems, capacitors/inductors and transient analysis. Overview of electronic devices, BJTs, FETs, op-amps. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MAT 266 (or 271); PHY 112 (or 131) |
| EST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 310 | Circuit Analysis II | Electronic device analysis and introduction to design. Power supplies, diode circuits, FETs, BJTs, op-amps. Emphasizes frequency response. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210 |
| EST | 315 | Digital Systems II | Digital electronics systems, HDL circuits and systems design techniques, and device applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 115 and 210; Credit is allowed for only EST 315 or 394 (Digital Electronics II) |
| EST | 345 | Planning and Delivering Engineering Projects | Project-based, hands-on course teaches team building, planning, soft skills, tracking progress, and powerful methods that deliver successful, on-time projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200 |
| EST | 350 | Microcontroller Applications | Interfacing of microcontrollers to sensors, switches, indicators, and other human interfaces using the C programming language. Applications involve the integration of both hardware and software. Also addresses applications dealing with open- and closed-loop applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 315; Credit is allowed for only EST 350 or 394 (Adv Micro Controllers) |
| EST | 370 | Sensors | Overview of sensor technology, including mechanical, magnetic, radiation, thermal, chemical, and biological applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200; EST 210; UET 331 |
| EST | 372 | Wireless Communication Systems | Components and signal processing for modern wireless communication systems, including major applications, problems, and new technologies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EST 310 or Information Technology major with IFT 100 |
| EST | 380 | Electronic Devices | Covers materials, structures, and technology for the design, production, and application of the major categories of electronic devices. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331; Credit is allowed for only EST 380 or 394 (Intro to Electronic Devices) |
| EST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 410 | Electronic System Design | Analysis and design of Op-amps, power amplifiers, and digital logic families. Feedback design using frequency response. Computer analysis and design. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 310; Credit is allowed for only EST 410 or 494 (Electronics Systems Design) |
| EST | 465 | Statistical Process Control | Introduces statistics, seven QC tools, and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, and quality system. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Senior standing; Credit is allowed for only EST 465, 494 (Statistical Process Control) or 565 |
| EST | 470 | Capstone Design I | Small-group projects designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 345; EST 370; EST 372 |
| EST | 471 | Capstone Design II | Continuation of a small-group project encompassing designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 470 |
| EST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EST | 490 | Electronics Project | Individual or small group projects in applied electronics; emphasizes lab practice or hardware solutions to practical problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Fulton Polytechnic School graduate student; minimum 15 hours graduate level courses |
| EST | 565 | Statistical Process Control | Seven QC tools and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, quality system, case study and lab experiment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree seeking or nondegree seeking) student; Credit is allowed for only EST 465, 565 or 598 (Statistical Process Control) |

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| EST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Pre-requisites: MS in Technology graduate student |
| EST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| ETH | 100 | Introduction to Ethnic Studies | Undertakes an introductory comparative analysis of ethnic groups to understand cultural diversity within the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | |
| ETH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 300 | Principles of Ethnic Studies | Familiarizes students with a range of analytical and theoretical frameworks in the field of ethnic studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | C | |
| ETH | 310 | Critical Research Methods | Examines methodological approaches common to programs in such disciplines as American Studies, Ethnic Studies, and Women's Studies. Critical qualitative, historical, archival, and feminist methodological approaches to the study of diverse United States populations comprise the focus of this course. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisite: Minimum 40 hours |
| ETH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ETH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| ETH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EVO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only BIO 494 (Emerging Infectious Diseases), EVO 520 or MIC 520 |
| EVO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 601 | Principles of Evolution | Introductory course for graduate students; covers the principles of evolutionary biology from theoretical, empirical, and historical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 610 | Research Areas of Evolution | Broadly conceived description of the current research areas of evolutionary biology. Expected of all first-year evolution students. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EVO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| EXW | 101 | Foundations in Exercise Science and Wellness | Student-centered instructional course designed to excite and propel the student into the development of a successful academic and professional career path in the field of exercise science and wellness. Presents a general overview of the career opportunities for students in the field with group and individual assignments that enable students to more thoroughly explore options related to their goals. Divided into 3 major sections: academic preparation, professional development and career exploration. Helps students develop their own individual blueprint for accomplishing their professional goals and understand the skills they need to develop along the way to be successful. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 102 | Principles and Foundations of Health Education and Health Promotion | Designed for students who anticipate working as a health educator in clinical, governmental, worksite/corporate, research-based, or other professional settings. Students gain an understanding of the selected historical, cultural, philosophical, professional and ethical issues in the practice of health education. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 105 | Physical Activity Instruction: Beginning | Beginning instruction in a variety of physical activities such as aerobics, aquatics, racquet sports, physical conditioning, and golf. Y grade only. May be repeated for credit. 2 hours per week. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 194 | Special Topics | | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 212 | Instructional Competency Laboratory | Methods of instructing and leading fitness activities including aerobic, resistance, and flexibility activities. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major |
| EXW | 214 | Flexibility Instructional Competency Laboratory | Science and methods of instruction related to flexibility exercises and activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major. |
| EXW | 216 | Muscular Strength Instructional Competency Laboratory | Science and methods of instruction related to resistance training and muscular strength activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Exercise and Wellness or Physical Education major |
| EXW | 218 | Cardiovascular Instructional Competency Laboratory | Science and methods of instruction for cardiovascular exercise and fitness activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisite: Exercise and Wellness or Secondary Education (Physical Education) major |

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| EXW | 284 | Exercise and Wellness Preinternship | Professional development course designed to help students prepare for their respective senior-year internships and post-graduate career fields, while developing and enhancing professional practice skills. Students engage in individual assessment and group learning with student peers through activities such as required readings and self assessments, career-related exploration assignments and networking. Utilizes on-campus resources, such as Career Services and the Writing Center, for support and assistance with course work and assignments. Focuses on developing long-term professional and interpersonal competencies career preparation, professional self marketing, and workplace professionalism. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 290 | Foundations of Health Promotion and Wellness | Introductory analysis of the roles, responsibilities and theories of professional fields of study related to health promotion, physical activity, fitness and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre/Co-requisites: EXW 100 or KIN 100; Minimum 30 earned hours |
| EXW | 302 | Fundamentals of Wellness | Overview of fundamental health, exercise and wellness concepts. Emphasizes personal wellness assessment and application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | |
| EXW | 310 | Computer Skills and Technology for Exercise and Wellness | Applies computer technology to principles of social marketing, tailored communication, e-health consumerism, and statistical analysis. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: Exercise and Wellness student; MAT 114, 117, 119, 142 or 170 with C or better |
| EXW | 311 | Special Populations in Exercise and Wellness | Introduces the challenged population and surveys the agencies that work with special populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 315 | Physiological Foundations of Movement | Studies human movement with emphasis on physiological function of the body in response to physical activity and fitness training. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 316 | Physiological Foundations of Movement Laboratory | Investigates theories and methods of exercise physiology in a laboratory and/or applied setting. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s) with C or better: BIO 201, 202. Corequisite(s): BS Exercise and Wellness major: EXW 315 |
| EXW | 320 | Management and Leadership in Exercise and Wellness | Studies management, leadership, legal, ethical, and programmatic theories and applications in fitness and wellness settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 102, 105 or 108; Minimum 30 hours |
| EXW | 322 | Spa Management I | History of the spa industry. Overview of different types of spas, spa programs and services, facilities and equipment, operational procedures and systems, the wellness component of spas, and computer applications in spa operations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | |
| EXW | 325 | Fitness for Life | Analyzes physical fitness and benefits of exercise with emphasis on application of strategies for fitness and wellness evaluation, behavior change, and lifelong program planning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 101; Minimum 30 hours |
| EXW | 330 | Kinesiological Foundations of Movement | Study and consideration of human movement with emphasis on kinesiology principles and their application to movement and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: BIO 201 with C or better |
| EXW | 335 | Physical Activity and Fitness Concepts | Topics are designed for the physical activity and health education professional and focus on application of basic exercise physiology and nutritional concepts in the design and implementation of exercise and physical activity programs to increase physical function and improve health risk factors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 342 | Health Behavior Change | Examines major theories of health behavioral change. Develops intervention strategies and techniques employed to facilitate health behavioral change. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101); minimum hours 45 |
| EXW | 344 | Physical Activity in Health and Disease | Examines the role of physical activity and fitness in the development of morbidity and mortality throughout the human life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): BIO 202; Pre- or corequisite(s): EXW 101 or 102 (or EXW 290 or 300) |
| EXW | 348 | Methods of Health Education | Intended for the pre-professional health educator to learn how to develop sound, effective, and appropriate presentation methods to create learning experiences that facilitate voluntary changes leading to health-enhancing behaviors. Focuses on the knowledge and skills necessary to understand learning and the diverse learner; structure the learning environment; develop appropriate behavioral learning objectives; select appropriate instructional methods; and develop quality lesson, presentation, and unit plans with sound strategies for evaluating learning. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre- or corequisite(s): COM 225; EXW 101 or 102 (or EXW 290 or 300) |
| EXW | 350 | Substance Abuse and Addictive Behavior | In depth study of the pharmacology and effects of addictive substances and the psychosocial risk factors and consequences of substance abuse. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; BIO 202; PSY 101 (PGS 101) |
| EXW | 380 | Body Image and Wellness | Explores body image in American culture from physical, psychological, historical, and societal perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| EXW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 400 | Stress Management for Wellness | Examines the stress response and management from a behavioral perspective as it pertains to individuals or groups. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202; PSY 101; 45 minimum hours |

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| EXW | 410 | Obesity Perspectives and Prescriptions | Provides a structure for understanding, critiquing and synthesizing the information and misinformation about obesity, weight loss and health. Explores topics: the obesity epidemic; health consequences of obesity; fitness and fatness; etiology of weight gain; health implications of weight loss; psychological, cultural, social and political considerations of obesity; and a review of the application of prevention and treatment of obesity. Examines a wellness perspective about obesity by considering obesity as a normal physiological response within a pathological environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BIO 202; PSY 101. Credit is allowed for only EXW 410 or EXW 494 (Obesity Perspectives and Prescriptions)Pre-req for EXW 410 |
| EXW | 412 | Pediatric Obesity | Covers a variety of aspects related to pediatric obesity including the causes and consequences in terms of physiologic, genetic, psychosocial, environmental and economic. Also discusses potential interventions such as behavioral, pharmacologic, surgical and public health and policy. Evidenced-based course where research guides class lectures and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 315 or KIN 340; Credit is allowed for only EXW 412 or KIN 446 or EXW 494 (Pediatric Obesity) or KIN 494 (Pediatric Obesity) |
| EXW | 420 | Exercise Testing | Theoretical basis and practical application of pre-exercise screening, exercise testing, estimates of energy expenditure, and interpretation of results. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: EXW 214, 216, 218 and 315 with C or better |
| EXW | 425 | Exercise Prescription | Theoretical basis for and application of general principles of exercise prescription to various ages, fitness levels, and health states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 214, 216, 218, 315, and 330 with C or better; Pre/Co-requisites: EXW 420 with C or better if completed |
| EXW | 436 | Community Health | Applies major concepts of community health. Focuses on populations, settings and social issues related to community health. Basics of epidemiology, disease prevention, and health promotion. Explores community health concepts related to organizing and building community coalitions and health programs. Also explores school health, maternal, infant and child health, minority health, and environmental influences on community health. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 101 or 102 (or 290 or 300) with C or better; EXW 342 with C or better |
| EXW | 444 | Epidemiology | Introduces epidemiological concepts and prepares the student to read, comprehend, and report epidemiological research. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290; Any CS statistics course with C or better |
| EXW | 446 | Health Promotion and Program Evaluation | Applies theory-based concepts and methods of health promotion and program evaluation. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290 (EXW 300) with C or better; EXW 342 with C or better |
| EXW | 450 | Social Determinants of Health and Health Behavior | Examines the social determinants (e.g., early childhood, family, schools, workites, built and food environments, and socio-economic status) of health and health behavior, particularly physical activity behavior and eating. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | (L or SB) & C | Prerequisite(s): EXW 101 or 102 (or 290 or 300) with C or better; PSY 101 (or PGS 101) with C or better |
| EXW | 454 | Health Promotion Program Planning and Implementation | Applies theory-based concepts and methods of health promotion (HP). Covers selected topics in HP across a variety of domains of health. Program planning concepts include the use of planning frameworks, needs assessments, and the use of theory in health promotion program planning. Also covers practical issues related to health promotion program implementation such as resource management and program marketing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 290 (EXW 300); EXW 342; Pre/Co-requisite: EXW 444 with C or better if completed |
| EXW | 456 | Health Promotion Program Evaluation | Covers program evaluation concepts including how to plan an evaluation, how to analyze and interpret data, and how to report evaluation results. Students learn a basic framework for conducting a program evaluation, various research/evaluation designs, and data analysis and statistics. Topics are covered in enough detail so that the student may understand how inferences are made regarding program evaluation. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 444; Pre/Co-requisite: EXW 454 |
| EXW | 460 | Resistance Training Application and Theory | Fosters critical thinking as it applies to resistance training theory. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 216 and 315 with C or better |
| EXW | 466 | Health Promotion Program Management and Administration | Uses a dynamic team process to build knowledge and skills for the effective administration of health promotion program proposals. Areas of emphasis are strategic planning, managing fiscal resources, demonstrating leadership, developing human resources, facilitating community partnerships, formative and summative evaluation. Aligns with specific objectives required for the Certified Health Education Specialist offered by the National Commission for Health Education Credentialing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 454; Pre/co-requisite: EXW 456 |
| EXW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisites: Exercise & Wellness concentration students:EXW 400, 420 and 425 with C or better or Health Promotion concentration:EXW 348 and 456 with C or better or Health Education and Health Promotion major with EXW 348, 454 and 456; 2.00 GPA |
| EXW | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| EXW | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EXW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EXW | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 501 | Research Statistics | Statistical procedures; sampling techniques, hypothesis testing, and experimental designs as they relate to research publications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 534 | Sports and Fitness Conditioning | Bases of sports and fitness conditioning, including aerobic and anaerobic power, strength, flexibility, and analysis of conditioning components for sports and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 535 | Advanced Exercise Assessment and Prescription | Theory and practice of laboratory methods in applied exercise physiology. Procedures for assessment and prescription for individuals with chronic disease. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 536 | Physiological Aspects of Physical Activity and Chronic Disease | Role of physiological mechanisms associated with acute and long-term physical activity and its influence on chronic disease and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 538 | Obesity, Exercise and Health | Critically examines scientific and medical evidence concerning obesity, exercise, and health across the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 542 | Health Promotion | Theory and research concerning fitness and wellness programs in nutrition, physical activity, smoking cessation, and stress management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 544 | Fitness/Wellness Management | Development of the fitness/wellness industry. Planning, organizing, promoting, and managing fitness/wellness programs. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 560 | Cardiopulmonary Rehabilitation | Exercise testing and prescription for cardiac and pulmonary patients as well as pharmacology, electrocardiography, pathophysiology of chronic diseases, and leadership of patients in cardiac rehabilitation and pulmonary rehabilitation programs. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 562 | Functional Assessment and Exercise Prescription for Older Adults | Assessment of functional capacity and prescription of exercise that is appropriate for older adults including healthy, frail, diseased and very old. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS Clinical Exercise Physiology or Exercise and Wellness major |
| EXW | 564 | Aging and Lifestyle Behaviors | Provides an overview of health behaviors in older adults. Centers on the perceptions and behaviors of older adults in reference to illness prevention, health promotion and reactions to acute and chronic illness and the context in which these behaviors occur. Specifically examines the psychological, familial, cultural and contextual factors which influence older adults' personal health practices and illness behaviors. Considers the older person as an individual in a complex system, engaged in decision making and his/her subsequent actions to maintain or improve health status. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 542 |
| EXW | 565 | Cardiovascular and Pulmonary Physiology | In-depth study of the physiology of exercise with special regard to cardiovascular and pulmonary responses in healthy and chronically diseased individuals. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS in Clinical Exercise Physiology major |
| EXW | 568 | Management and Treatment of Chronic Disease for the Clinical Exercise Physiologist | Investigates the physiology, pathophysiology and treatment options for a variety of diseases that the clinical exercise physiologist routinely encounters in the work environment. Prepares students to qualify for ACSM Clinical Exercise Physiologist certification. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 560 |
| EXW | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EXW | 597 | Capstone Project | For non-thesis students in the MS degree program to provide a culminating field experience or non-research project for students to apply the coursework and healthy aging concepts. | N | RSC | N | YGB | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 500, 501, 536, 542 and 591 |
| EXW | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 635 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 640 | Analysis of Variance for Exercise and Wellness | Analyzes variance methods with an emphasis on research measures of human performance. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 641 | Qualitative Research Methods | Introductory overview of qualitative research methods frequently used in education and health. Emphasizes analysis of research and practical application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 642 | Exercise Epidemiology | Physical activity, exercise, and physical fitness and the development of chronic disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 500 with C or better; EXW 501 with C or better |
| EXW | 643 | Correlation/Regression/Multivariate Statistics | Graduate-level statistics course for PhD/master's students who will be doing research in the area of exercise and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 645 | Advanced Applied Methods and Data Analysis | Heavily applied focus on implementing research methods and statistical modeling techniques in the health promotion sciences. Addresses practical issues in specifying, interpreting and presenting research findings using appropriate statistical techniques. Addresses reporting standards (e.g., CONSORT, STROBE, PRISMA) and practical issues related to manuscript submission. Covers analytical methods including multiple regression and logistic regression, ANOVA, mediation and moderation, exploratory factor analysis, multilevel models for hierarchical data and intensive longitudinal data, basic time-to-event analyses (i.e., survival), and meta-analysis; also remains flexible to address critical and emerging methodologies in the health promotion sciences. Covers statistical methods in a conceptual nature with a focus on the use of statistical software packages (primarily SPSS) and interpretation of outputs. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 640, 643 |
| EXW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 701 | Advanced Research Methods | Provides doctoral students in Nutrition and Health Promotion with instruction in methods to enhance scientific writing skills in the health sciences and guidance through the process required to organize and submit a fundable research grant proposal. | N | SEM | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 700 |
| EXW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | 370 | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman Standing; Maximum 25 hours |

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| FAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| FAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 301 | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS or SOC 324 |
| FAS | 331 | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 360 | Black Families in the Diaspora | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| FAS | 361 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Prerequisite(s): SOC 101 or SOC 301 or CDE 232; SOC 390; Credit is allowed for only FAS 361 or SOC 391 |
| FAS | 370 | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | 390 | Supervised Research Experience | Practical, firsthand experience within current faculty research projects in family studies or child development. Y grade only; may be repeated for total of 6 hours. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 431 | Parent-Adolescent Relationships | Dynamics of the relationships between parents and adolescents. Developmental characteristics of adolescence and the corresponding adult stage. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 331 with C or better; Credit is allowed for only SOC or FAS 435 |
| FAS | 440 | Fundamentals of Marriage and Family Therapy | Introduces the fundamental orientations of marriage and family therapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| FAS | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| FAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| FAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |

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| FAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEL | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 503 | Academic Professional Development | Becoming and working as a academic, including how to write a vita, choose a thesis topic, or find dissertation data. | N | REC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 505 |
| FAS | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 507 |
| FAS | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling. Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. <u>Projects involve conducting analyses and writing results.</u> | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 508 |
| FAS | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 509 |
| FAS | 512 | Secondary Data Anlysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 512 |
| FAS | 531 | Theoretical Issues in Family Sciences | Historical and current approaches to theory development, evaluation, and application in family studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 539 | Research Issues in Family Interaction | Critical review of current and past research in the area of family dynamics. Emphasizes interactional processes within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 570 | Introduction to Marriage and Family Therapy | Introduces major marriage and family therapy orientations. Reviews history, theory, application, and outcome research for each orientation. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 571 | Assessment in Marriage and Family Therapy | Assessment and outcome evaluation of couples and families involved in marital and family therapy. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 572 | Advanced Techniques in Marriage and Family Therapy | In-depth review of assumptions and advanced techniques associated with contemporary marriage and family therapy approaches. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 573 | Dysfunctional Families | Critical review of current theory and empirical evidence connecting marital and family interaction patterns with aberrant behavior. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 574 | Family Theory for Marriage and Family Therapy | Examines the theoretical orientations within the family therapy field, including the evolution, premises, and assumptions of each. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 575 | Applied Issues in Couples - Therapy | Examines issues unique to therapeutic work with couples, including lifespan transition, multicultural issues, divorce, parenting, and remarriage. Seminar. Enroll requirements: Pre-requisites: Admission into MAS-MFT program. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 576 | Applied Issues in Human Development for MFT: Psychopathology | Recognition and diagnosis of maladaptive behavior according to DSM criteria across human development. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 577 | Applied Issues in Children and Adolescents in Marriage and Family Therapy | Examines developmental factors that lead to disorders in children and adolescents, with an emphasis on a systemic framework. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 578 | Applied Issues in Sexuality for Marriage and Family Therapy | Examines the major methods used to assess and treat sexual issues and the treatment of sexual disorders. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 579 | Applied Research in Marriage and Family Therapy | Critical examination of research concepts, quantitative and qualitative research designs, and applicability in clinical settings. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 581 | Professional Issues and Ethics | Examines legal and ethical concerns of marriage and family therapists, emphasizing licensing standards and the Code of Ethics. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only FAS 586 or SOC 586 |
| FAS | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FAS | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 587 or SOC 587. Credit is allowed for only FAS 588 or SOC 588 |
| FAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better. Credit is allowed for only FAS 264 or SOC 264 |
| FAS | 301 | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| FAS | 331 | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FAS | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 421 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). Credit is allowed for only ALD 431, 531 or FAS 421 |
| FAS | 436 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| FAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| FAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 123 | ASU Financial Literacy | A practical approach to financial challenges faced by ASU students. Emphasizes financial choices likely to be encountered while at ASU, as well as issues to be encountered immediately upon graduation. Topics include credit cards, student loans, credit scores, saving, investing, insurance, transportation, housing, taxes, goal setting and budgeting. | N | LEC | N | YGB | W.P. Carey School of Business | Department of Finance | 1 | | Credit is allowed for only FIN 123 or 191(ASU Financial Literacy) |
| FIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-3 | | |
| FIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| FIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| FIN | 300 | Fundamentals of Finance | Theory and problems in financial management of business enterprises. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: ACC 231, 232 or 261; ECN 212 and 221 (or ECN 231, IEE 380 or STP 280); MAT 211, 266 or 271; Non-Business min. 2.5 GPA and min. 56 hours; Pre- or corequisite: ACC 241, 242 or 271; Credit for only FIN 300, 302 or 303 |
| FIN | 302 | Managerial Finance | Theories and techniques used for business decisions in working capital management, capital budgeting, financial control, and long-term financing. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisites: W.P. Carey Finance major; with C or better: ACC 231, 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite: ACC 241, 242 or 271 with C or better if completed. Credit allowed for only FIN 302 or 303 |
| FIN | 303 | Honors Finance | Covers basic principles of finance, practical tools for financial decision making, and evaluation methods employed by the firm. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisites: W.P. Carey Honors student; with C or better: ACC 231, 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite: ACC 241, 242 or 271 with C or better if completed. Credit allowed for only FIN 302 or 303 |
| FIN | 331 | Financial Markets and Institutions | Analyzes financial markets and intermediaries. Theory of financial intermediation, interest rate theory, money and capital market instruments, and government regulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BS major or Business minor; with C or better: ACC 231 or 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed |
| FIN | 361 | Advanced Managerial Finance | Builds on FIN 302. Advanced material on capital budgeting, cost of capital, CAPM, asset valuation, capital structure, and financial policy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 302 with C or better |
| FIN | 380 | Personal Financial Management | Dynamic analysis of personal financial planning, including time value of money, stock and bond investment, and retirement and estate planning. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree student with minimum 2.00 GPA OR Graduate student; Not for Finance major credit |
| FIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS non-Finance major; FIN 300 (or 302 or 303) with C or better |
| FIN | 421 | Security Analysis and Portfolio Management | Security analysis theory and practice. Selection and management of financial asset portfolios. Securities markets and portfolio risk-return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey Finance BS major; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better |
| FIN | 427 | Derivative Financial Securities | Study of stock options, index options, convertible securities, financial futures, warrants, subscription rights, and arbitrage pricing theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 421 with C or better |
| FIN | 431 | Management of Financial Institutions | Asset/liability and capital management in financial institutions. Influence of market factors and regulatory agencies. Emphasizes commercial banks. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; ACC 315, 303 or 340 with C or better; FIN 331 and 361 with C or better; Honors student in Finance: FIN 303 and FIN 331 with C or better |

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| FIN | 456 | International Financial Management | Exchange rate determination, financial markets, managing multinational corporations, capital budgeting, and hedging currency risk exposure from an international perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | G | Prerequisite(s): W.P. Carey Finance BS major; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better. OR Honors student in Finance: FIN 303 and 331 with C or better |
| FIN | 461 | Financial Cases and Modeling | Case-oriented capstone course in managerial finance. Contemporary issues of liquidity management, capital budgeting, capital structure, and financial strategy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | L | Prerequisite(s) with C or better: ACC 340, FIN 303 (or FIN 361), 331; minimum 87 hours; BS Finance major. Pre- or corequisite(s): FIN 421 with C or better if completed |
| FIN | 471 | Investment Portfolio Management | Under faculty supervision, students manage over \$500,000 of the ASU Foundation's assets over the course of the year. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Pre-requisite: FIN 303 or 361 with C or better |
| FIN | 472 | Investment Banking Industry Scholars | Provides conceptual basis for performing analysis, providing advice and making decisions in elite financial services firms. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Prerequisite(s): application and selection process. Credit is allowed for only FIN 472 or FIN 494 (Investment Banking Industry Scholars) |
| FIN | 481 | Honors Seminar in Finance | Honors course covering topics that include theory and applications concerning managerial finance, investments, and financial institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey Finance BS major with Honors status; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better |
| FIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisites: W.P. Carey BS student; FIN 300, FIN 302 or 303 with C or better |
| FIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey Finance BS student; ACC 315 or ACC 303 or ACC 340, FIN 331, and FIN 303 or FIN 361 all with C or better |
| FIN | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-7 | | Pre-requisites: W.P. Carey Finance students with professional status; FIN 331 and 361 with C or better; ACC 315 or 340 with C or better |
| FIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-3 | | Pre-requisites: W.P. Carey Finance students with professional status |
| FIN | 502 | Managerial Finance | Develops analytical techniques and financial theories used to make optimal decisions in a corporate setting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2-4 | | Pre-requisites: ACC 502 with C or better; ECN 501 with C or better |
| FIN | 520 | Valuation Techniques | Improves the understanding of valuation concepts and how to apply them. Shows how to value assets using free cash flow and economic value-added methods. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 525 | Investment Strategies | Presents the fundamental principles of risk and return, portfolio diversification, asset allocation, efficient markets, active portfolio management, portfolio evaluation. Reviews selected alternative investment strategies such as hedge fund investments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 530 | Derivatives | Intermediate- to advanced-level course in derivative assets such as options, forward and futures contracts, swaps and financial engineering. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 540 | Advanced Financial Management | Offers a comprehensive exploration of the revolutionary developments occurring in the world's financial markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 545 | Advanced Corporate Finance | Studies major decision-making areas and selected topics in corporate finance. Attempts to develop decision-making ability in these areas using both lectures and cases. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 545 or 591 (Advanced Corporate Finance) |
| FIN | 550 | Fixed Income | Intermediate- to advanced-level course in fixed income instruments and associated relative valuation of the securities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 555 | Entrepreneurial Finance | Provides an overview of the economics and institutions involved in entrepreneurial finance. Focuses on the financing of new ventures. Consists primarily of case analysis, supplemented with in-class exercises and lecture material. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 560 | International Finance | Examines the financial issues of an international investment decision. Main topics include foreign exchange market, investment alternatives in the international capital markets, and the management of foreign exchange risk. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 565 | Risk Management in Banks and Financial Institutions | Provides a risk management view of financial institutions (also known as financial intermediaries). Traditionally, banking courses have focused on an overview of the financial services industry, sector by sector, concentrating on balance sheet presentations and overlooking management decision making and risk management. In contrast, this course emphasizes a risk management approach. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |

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| FIN | 575 | Finance Capstone | Provides a culminating experience as a step in completing the degree. Applies finance principles related to the investment, risk management and financing policies of the firm to develop decision-making ability in these areas. Emphasizes analysis of finance problems through selected readings and case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 575 or 591 (Finance Capstone) |
| FIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: FIN 502 with C or better |
| FIN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 781 | Theory of Finance | Fundamental tools of financial economics; asset pricing, arbitrage, option pricing, capital structure, dividend policy, asymmetric information, and transaction-cost economics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 782 | Theory of Finance II | Fundamentals of corporate finance, contract theory, agency problems, and game theory applications in Finance. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 783 | Empirical Asset Pricing | Asset pricing models in finance; efficient market hypothesis, empirical factor models, option pricing basics. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 785 | Financial Economics of Capital Markets | Asset pricing theory, equilibrium asset pricing models, and the equity premium puzzle; incomplete and imperfect markets. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 786 | Corporate Finance | Issues in corporate finance covering topics that impinge on corporate finance, financial contracting, intermediation; empirical corporate finance; microstructure. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 201 | Film: The Creative Process I | History, elements, and techniques of theatrical film: cinematography, directing, acting, scriptwriting, producing, and criticism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | |
| FMP | 220 | Film and Media Post-Production I | Required 45-hour lab designed to teach students how to use the Avid Media Composer editing program and supporting software with an emphasis on editing techniques and workflow. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 100-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified User. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Film and Media Production student |
| FMP | 222 | Education in Film | Critically examines how teachers, students, administrators and educational issues are dramatized and represented in popular media. Explores professional teacher preparation, socio-cultural contexts of education systems and learning, and the use of cinema as social critique. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 102) with C or better. Credit is allowed for only FMP 222 or FMP 294 (Education in Film) |
| FMP | 250 | Sex and Violence in Film and TV: Ethics Survey | Sex and violence portrayals in media; examines societal evolution, technological development, market imperatives, production codes, and industry realities and practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 255 | Media Authorship | Surveys the manipulation, editing, compression, encoding and search engine optimization of digital sound and video media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | Credit is allowed for only FMP 255 or 294 (Media Authorship) |
| FMP | 261 | Introduction to Screenwriting | Basic skills of screenwriting including exercises in conflict and resolution, plot points, and theories of three-act structure and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better |
| FMP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 300 | Focus on Film | Specialized study of prominent film artists, techniques, and genres. Emphasizes the creative process. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: ENG102, 105 or 108 with C or better |
| FMP | 318 | Directing for Film | In-depth analysis of directing theory, textual analysis, visualization, shot composition and spatial connection, staging, rehearsal techniques, and camera movement. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film and Media Production student; FMP 320 with C or better |
| FMP | 320 | Film and Media Post-Production II | In-depth analysis of editing theory, storytelling, nonlinear editing techniques and equipment, basics of visual and audio effects and color grading using the Avid Media Composer editing program and supporting software with an emphasis on storytelling and aesthetics. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 200-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified Professional. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s) with C or better: FMP 220; FMP 300 (Film Production Part 1 or Film Production: Film & Media Part 1 or THE 400); BA Film (Film & Media Production) major |
| FMP | 330 | Professional and Technical Writing for Film/TV Industry | Professional (noncreative) writing skills that prepare students for a career in the entertainment industry. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 220 with C or better; Minimum 56 hours; Credit is allowed for only FMP 330 or 494 (Prof & Tech Writing for Film, Media & TV Industry) |
| FMP | 345 | Cinematography I | Cinematographer's role, photographic and visual theory, framing, shot composition, cameras and equipment, crew management, basic lighting for film and video. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: FMP 220 and FMP 300 OR FMP 394 (Non-Linear Editing for Film and Media) |
| FMP | 365 | Developing a Series | Acquaints students with the development process for episodic series (network, cable, Web, on-demand). Also explores the many facets of the television industry (creative, financial, cultural, historical) and surveys the advances in television content along with an analysis of the cultural impact of television on society. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): FMP 261 with B or better; Digital Culture (Film) or Film major or Film & Media Production minor or Film & Media Production concentration; junior or senior standing. Credit is allowed for only FMP 365 or 394 (Developing a TV Series) |
| FMP | 380 | Film Production Crew | Provides a practical, on-set experience for all Film (Filmmaking Practices) majors. | N | PRA | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: BA Film (Filmmaking Practices) major; 2.50 ASU cumulative GPA; FMP 300 with C or better; Credit is allowed for only FMP 380 or 494 (Film Production Crew) |
| FMP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 398 | Capstone Development | Provides the opportunity for all Film and Media Production majors to conceive, develop and complete the intellectual property that will form the basis of their required final capstone projects for FMP in the School of Theatre and Film at Arizona State University. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisites: |
| FMP | 417 | Business Ethics in Entertainment | Business and ethical practices of the entertainment industry; analysis of ethical decision-making techniques. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 465 | Series Writers Workshop | Offers selected students the opportunity to develop and refine material for a proposed episodic series through collaborative workshops and writing sessions that are equivalent to the development processes utilized in various industry paradigms (network, cable, Internet/on-demand). | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: FMP 365 or 394 (Developing a TV Series) with C or better; Digital Culture (Film) or Film major or Film & Media Prod. minor or BIS (Film & Media Prod.); minimum junior standing. Credit for only FMP 465 or 494 (Television Writing Workshop) |

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| FMP | 475 | Producing Series | Function and responsibilities of episodic series producers and production executives for television-based platforms (network, cable, internet/on-demand). Explores a close examination of the business of television, specifically budget, license fees, distribution, and union obligations. Other topics include the structure of studios and networks, producing and marketing series for traditional and new media platforms, and general entertainment business practices. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Film (Film & Media Production) or Film (Filmmaking Practices) major; minimum junior standing. Credit is allowed for only FMP 475 or FMP 494 (Producing Television) |
| FMP | 480 | Film Production Capstone I | Preparation for final project: screenplay, budget, shooting schedule, production lists and reports for preproduction of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 318 with C or better; THE 220 with C or better |
| FMP | 481 | Film Production Capstone II | Final project shooting and postproduction: shooting, editing picture, sound, effects and music; audience screening of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 480 with C or better |
| FMP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| FMP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisites: Film and Media Production student or Filmmaking Practices student or Film and Media Production minor |
| FMP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |
| FMP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: Film & Media Production or Filmmaking Practices student |
| FMP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisite: Fine Arts Graduate student |
| FMS | 100 | Introduction to Film | Introduces the narrative structure, visual style, and cultural elements of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | HU |
| FMS | 110 | Introduction to New Media | Explores the cultural effects of new media technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | L or HU |
| FMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 200 | Film History | Introduces the technological, aesthetic, social, and economic aspects of international film history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | (L or HU) & H |
| FMS | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | HU & C |
| FMS | 209 | Screenwriting Fundamentals | Studies the creativity and the technique of screenwriting for the conventional narrative film and for TV; student writing exercises culminate in a script for micro cinema. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | HU & C |
| FMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 300 | Television and Cultural Studies | Applies cultural studies theory and method to the study of American television history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | L or HU |
| FMS | 302 | U.S. Media Now | Examines the business of contemporary U.S. film, television, and new media and its relationship to artistic vision and production through research and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 309 | Intermediate Screenwriting | Utilizing the elements of storytelling, students develop and write a treatment and the first act of a screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies conc; ENG 102 (or 105 or 108) with C or better; FMS 100 with C or better; FMP 261 (or FMS 209 or THP 261) with C or better |

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| FMS | 312 | Film, Media, and Politics Today | Examines how entertainment technologies inform political innovation and campaigning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 340 | Contemporary American Film and Popular Culture | Analyzes American films, television programs, and music as popular cultural documents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| FMS | 351 | Emerging Digital Media | Analyzes modern cultural and digital technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| FMS | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | |
| FMS | 354 | Critical Studies in Animation | Provides critical and practical tools for analyzing mainstream, experimental, and hybrid animation aesthetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: FMS 100 |
| FMS | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Credit is allowed for only FMS 370 or TCL 370 |
| FMS | 374 | American Visions: Innovators in Popular Media | In-depth examination of the career of an innovator in media, whether a producer, director, or scriptwriter, through his/her status as a unique storyteller of the American experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better; Minimum 45 hours |
| FMS | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or REL 376 |
| FMS | 377 | Baseball, Film, and American Dreams | Critical viewing and analysis of both narrative and documentary baseball film. Genre typically explores American values and national culture, and changes in our concepts of gender roles, race, aging, social class. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 409 | Advanced Screenwriting | Utilizing the elements of storytelling, students outline, develop, and write a feature-length screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better; FMS 309 with C or better |
| FMS | 411 | Screenwriting Adaptation Studies | Explores the many issues related to narrative adaptation across movies and other media such as television, various Internet phenomena and gaming. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s) with C or better: ENG 102, 105 or 108; FMS 200; Film and Media Studies major, minor or BIS Film and Media Studies concentration; Credit is allowed for only FMS 411 or 494 (Screenwriting Adaptation Studies) |
| FMS | 426 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| FMS | 427 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Minimum 55 hours; One 200-level course in literature, art history, history, or film and media studies with a grade of B- or better; Credit is allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| FMS | 430 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| FMS | 440 | Los Angeles: Movies and Culture | Explores film treatment of the historical culture of Los Angeles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 441 | Global Cinema | Examines how film represents three important dimensions of globalization: its relationship to national culture, terrorism, and immigration. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 442 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| FMS | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| FMS | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| FMS | 450 | Technology, Culture, and Media | Studies the socio-political relationships among technology, culture, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 460 | Masculinity and Film | Examines the representation of masculinity and the male body in film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 461 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FMS | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only FMS 464, ENG 458 or TCL 464 |
| FMS | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 465 |
| FMS | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | Credit is allowed for only FMS or TCL 466 |
| FMS | 468 | Crime and Violence in American Film | Addresses three primary aspects of crime and violence in film: representation, societal attitudes, effects on audience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |
| FMS | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | |
| FMS | 482 | Entertainment Industries | Uses historical methodologies to critique emerging trends in the business of new media storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102 (or ENG 105 or 108) with C or better; FMS 100 with C or better |
| FMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | |
| FMS | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| FMS | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 490 | Capstone Seminar | Capstone seminar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major; minimum 56 hours; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | | |
| FMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 502 | Hollywood Film Historiography (Online) | This course is offered online only. Explores historiographic and critical scholarship on Hollywood as an industrial, cultural, and aesthetic enterprise. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 503 | Media Industries | Examines the business of contemporary U.S. media practices including film, television, Web-based media, music, video games, mobile phones, and other interactive media. Explores the changing economic structures of these media industries and their relationship to artistic vision and production. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Master of Liberal Studies student or MAS in American Media and Popular Culture student. Credit is allowed for only MLS or FMS 504 |
| FMS | 507 | Crime and Violence in American Film (Online) | This course is available online only. Focuses on historiographic and critical scholarship on three aspects of crime and violence in American film: (1) regulation and censorship; (2) representation and society; and (3) theories about the effects on audiences of viewing crime and violence in films. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 511 | Fundamentals of Cinema & Television Narrative Online | Studies the creativity and the technique of screenwriting for the conventional narrative film and for television. Student writing exercises culminate in a script for micro-cinema. Seminar. Pre-requisite: online student in MAS American Media and Popular Culture | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 512 | Intermediate Cinema and Television Narrative (online) | Focuses on the feature-length screenplay; students complete the first act and treatment of an original feature. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 520 | Cultural History of US Television: Theory & Method | Engages both the theory and methods of cultural studies as implemented in television studies and U.S. television history (from the 1940s to the present). | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| FMS | 522 | Los Angeles: Movies and Culture | Focuses on historiographic and critical scholarship of industry, genre and representation in post-war, self-reflexive Hollywood cinema. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite(s): degree- or nondegree-seeking graduate student |

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| FMS | 523 | Film Authorship | Explores the notion of authorship in film, television, and digital media by engaging with a number of critical methodologies such as auteurism, structuralism, post-structuralism, feminism. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: MAS American Media and Popular Culture students |
| FMS | 527 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| FMS | 543 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (genius, deviant, etc.); and how notions of creativity are infected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ARS 443 or ARS 543 or FMS 430 or FMS 543 or ARS 598 (Artists in Film: Biopics) |
| FMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FOR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 210 | Sociology of Murder | Sociological perspectives on various forms of murder and types of murderers. Also considers forms of punishment for murder. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SB | Credit is allowed for only FOR 210 or SOC 210 |
| FOR | 286 | Principles of Forensic Science | Introduces and surveys the practices and procedures used by forensic scientists in the modern crime laboratory. Students apply lecture topics to forensic-themed laboratory activities. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181, 182; CHM 113, 116 |
| FOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 350 | Computer Forensics | Concepts of computer forensics, forensic analysis techniques, computer forensic tools and software for forensic investigators, network forensics, data forensics, mobile device forensics, malware forensics, cyber crimes and fraud, computer security incident response. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 100 with C or better |
| FOR | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| FOR | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375; Credit is allowed for only FOR or LSC 376 |
| FOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |
| FOR | 410 | Professional Practices in Forensic Science | Focuses on professional practices as they relate to the forensic scientist or forensics professional working in a modern crime laboratory (public or private). Topics include quality assurance programs and practices; ethics and analytical bias; the audit and accreditation processes; and the relationship with forensic science and the courtroom, to include courtroom testimony procedures. Includes oral mock court scenarios, as well as enhancing writing skills appropriate to the forensic sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BIO 305 or FOR 286; ENG 102 or 105 or 108 |

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| FOR | 420 | Modern Practices in Forensic Science | In-depth treatment of the practices and procedures used by forensic scientists in the modern crime laboratory. Students apply lecture topics to forensic-themed laboratory activities. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181, 182, 305 (or FOR 286); CHM 113, 116. Pre- or corequisite(s): BCH 371, 372; LSC 347, 348 |
| FOR | 454 | History of Genocide | Examines the individuals and institutions responsible for the most infamous episodes of state-sanctioned violence in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | G & H | Prerequisite(s): minimum 45 hours. Credit is allowed for only FOR 454 or HST 454 |
| FOR | 475 | Principles of Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394; Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| FOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): minimum 45 hours |
| FOR | 485 | Forensic Science Capstone | Culmination course integrating all components of Forensic Science major courses demonstrating knowledge and competency in the field of forensic science. Includes Forensic Science Assessment Test (FSAT) preparation and FSAT completion. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 305 or FOR 286; FOR 410; 6 additional hours of upper-division FOR coursework; senior standing |
| FOR | 486 | Peer Mentoring in the Forensic Sciences | Advanced students learn and apply mentoring skills in teaching labs. | N | SEM | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours |
| FOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | |
| FOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| FOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FRE | 101 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 101 if credit with C or better earned in FRE 101, 102, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 102 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Prerequisite(s): FRE 101. Students may not enroll in FRE 102 if credit with C or better earned in FRE 102, 111, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 110 | Intensive French I | Proficiency-based course that provides an intensive introduction to the French language and culture. Introduces the language and culture through a variety of topics from everyday life. Focuses on the development on all four communicative skills. Class time is spent mainly on communicative activities based on active listening and speaking practice of everyday French as used in different social situations, with much use of various print, video and Web-based media. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| FRE | 111 | Fundamentals of French | Primarily for students with two years of high school French who need review to enter second year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not enroll in FRE 111 if credit with C or better earned in FRE 101, 102, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| FRE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 201 | Intermediate French I | Grammar review, with emphasis on development of skills of speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 201 if credit with C or better earned in FRE 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 202 | Intermediate French II | Continuation of grammar review with emphasis on development of skills in speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 202 if credit with C or better earned in FRE 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |

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| FRE | 210 | Intensive French II | Second semester of an intensive, proficiency-oriented language course designed to develop functional proficiency in French in a dynamic communicative environment. Class time is spent mainly on a variety of communicative activities based on active listening and speaking practice of everyday French as used in different social situations, with much use of various print, video and Web-based media. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): FRE 102 or 110 or 111 with C or better |
| FRE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 305 | Readings in French Literature | Survey of francophone literature designed to teach reading with facility and comprehension. Vocabulary building, familiarity with literary terms, their meaning and use, and introduction to textual analysis of literary genres are major elements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | FRE 202 with C or better. Students may not enroll in FRE 305 if credit earned in FRE 321 or 322 |
| FRE | 311 | Oral and Written Expression I | Practices interpersonal and interpretive writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): FRE 202 with C or better |
| FRE | 312 | Oral and Written Expression II | Practices presentational writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): FRE 202 with C or better |
| FRE | 315 | French Phonetics | Practice and theory of French pronunciation. Emphasizes standard French, although an overview of regional varieties is offered. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 311 |
| FRE | 319 | Business French | Introduces the structure, vocabulary, and practices of the French business world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312 |
| FRE | 321 | French Literature | Representative masterpieces and significant movements of French literature of the Middle Ages through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: FRE 305; FRE 312 |
| FRE | 322 | French Literature | Literature of the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 305; FRE 312 |
| FRE | 325 | French Language and Culture Through Film | Reviews French vocabulary and grammar through French films, with emphasis on listening comprehension and oral and written production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s) with C or better: FRE 311, 312 |
| FRE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 411 | Advanced Spoken French | Improvement of spoken French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 311; 6 hours of 300-level French |
| FRE | 412 | Advanced Written French | Improvement of composition skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312; 6 hours of 300-level French |
| FRE | 415 | French Civilization I | Political, intellectual, social, economic, and artistic development of France from its origins to the end of the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: 6 hours of upper-division French |
| FRE | 416 | French Civilization II | Political, intellectual, social, economic, and artistic development of France from the 18th century to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | pre-requisites: 6 hours of upper-division French |
| FRE | 421 | Structure of French | Phonology, morphology, syntax, semantics, and varieties of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): FRE 311, 312; SLC 201 |
| FRE | 422 | Applied French Linguistics | Applies linguistic theory and second-language acquisition theory to teaching of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 213 or SLC 201; FRE 311 or FRE 312 |
| FRE | 423 | French Syntax | Analyzes French syntactic structure by contemporary theoretical models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 213 or FRE 421 or SLC 201 |
| FRE | 441 | French Literature of the 17th Century | From 1600 to 1660. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 442 | French Literature of the 17th Century | From 1660 to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 445 | French Literature of the 18th Century | Contributions of the philosophers and the development of the novel and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 451 | French Poetry of the 19th Century | From Romanticism to Parnassian poetry to Symbolism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 452 | French Novel of the 19th Century | From Constant, Hugo, Balzac, Stendhal, and Sand to Flaubert and Zola, with emphasis on major literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 453 | Theater of the 19th Century | From Romantic drama to the Symbolist Theater. Representative plays of Hugo, Musset, Vigny, Dumas, Becque, Rostand, Feydeau, and Mirbeau. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 461 | Modern Narrative | Representative authors from Gide to the new Nouveau Roman. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 462 | Modern Poetry | Representative authors from Mallarme to Bonnefoy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 471 | The Literature of Francophone Africa and the Caribbean | Selected prose, poetry, and drama of black authors from Africa and the Caribbean. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 472 | Franco-Canadian Civilization | Study of the civilization of Quebec in particular through its history, language, literature, music, and customs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): 6 hours of 300-level French courses |
| FRE | 480 | Translation Theory and Practice | Theoretical and practical approaches to the fundamentals of meaning-based translation. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 412 |
| FRE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| FRE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| FRE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FRE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| FRE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| FRE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| FRE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 510 | Introduction to Textual Analysis | Introduces various oral and written techniques aimed at explicating literary texts. Required of all French graduate students focusing on literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FRE 494 (Introduction Textual Analysis) or 510 |
| FRE | 521 | History of the French Language | Principal phonological, morphological, and semantic developments of French from Latin to present, with emphasis on Old and Middle French. Some familiarity with Latin is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 790 | Reading And Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 100 | Introduction to Engineering | Introduces the engineering design process; working in engineering teams; the profession of engineering; engineering models; written and oral technical communication skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 2 | | |
| FSE | 104 | EPICS Gold Feasibility and Planning | First of a sequence of three one-credit service-learning courses in which EPICS GOLD groups are formed from students potentially representing all engineering, computer science and construction disciplines as well as other ASU majors, including sustainability, business, liberal arts, sciences and others. Groups of 4-5 students work together to assess the feasibility and sustainability of their proposed plans for long-term projects that solve problems and benefit clients and often, the larger community. Project work centers on the engineering, technology, computing, sustainability, business and other needs of a not-for-profit community partner; interdisciplinary group interaction is an integral element for the project success. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student. Credit is allowed for only FSE 104 or 194 (EPICS Gold I) |
| FSE | 150 | Perspectives in Grand Challenges for Engineering | Explores social dimensions of developing engineering solutions to meet local and global challenges. Introduces National Academy of Engineering (NAE) Grand Challenges for engineering and Grand Challenge Scholars Program. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | SB | Prerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for EngineeringPrerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for Engineering |

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| FSE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | HU | Credit is allowed for only SOS 181, FSE 181, or CEE 181 |
| FSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 201 | Engineering Undergraduate Teaching Assistant | Theory and rationale of active learning and teaching strategies that stimulate intellectual development. Leadership, teaching, teamwork and communication skills needed to facilitate effective undergraduate learning in engineering. Implementation of these skills in a classroom setting. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Ira a Fulton School of Engineering major; minimum sophomore standing |
| FSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 301 | Entrepreneurship and Value Creation | In-depth application of entrepreneurial concepts including opportunity recognition, value creation, and new business management. Students learn how to identify the needs of a market and problem solve to meet those needs through innovation. Students learn common mistakes made in the new venture process and how to work to avoid these mistakes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prereq(s): Business undergrad; ACC 241 or 242 with C or better OR Engineering juniors OR non-business junior; min 2.50 cum ASU gpa; MGT 290 with C or better; Pre- or coreq(s): MGT 340 w/C or better if completed; Credit allowed only for FSE 301 or MGT 360 |
| FSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 399 | Cooperative Work Experience | Work periods with industrial firms or government agencies alternated with full-time course work. Not open to students from other colleges. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| FSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |
| FSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 501 | Technology Entrepreneurship | Fundamental principles and concepts of technology entrepreneurship. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| FSE | 502 | Strategic Enterprise Innovation | Strategies, techniques, and practices of process, product, and management innovation across the enterprise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: School of Engineering Graduate student |
| FSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 590 | Reading and Conf | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 594 | Conf and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering graduate student |
| FSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GBL | 20 | Language Foundations | Entry-level course explores the grammatical, syntactic and cultural underpinnings of the English language for international students studying English as a foreign language. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 0 | | |
| GBL | 22 | Special Programs Training | | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 24 | Special Programs Field-Based Learning | | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 25 | Special Programs English for Specific Purposes | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 26 | Special Programs Project Work | | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 27 | Special Programs Current Issues and Topics | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 28 | Academic Culture | Multidisciplinary approach to American academic culture. Designed for international students who will be matriculating into an American university and explores such themes as study skills, using academic resources and participating fully in academic life. | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 40 | Basic 1 Listening/Speaking | On completing the Basic 1 Listening/Speaking course, a student will be able to (1) follow directions and comprehend main ideas and supporting details of short, simple passages and conversations spoken slowly; and (2) speak informally to express basic needs, habits and descriptions in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 41 | Basic 1 Reading/Writing | On completing the Basic 1 Reading/Writing course, a student will be able to (1) recognize main ideas and find supporting details in selected reading passages of a few pages; and (2) produce a guided writing with a personal point of view, demonstrating level-appropriate control of grammar, word forms, and punctuation. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 42 | Basic 1 Structure | This course covers helping verbs, pronouns, adjectives, count/non-count nouns, and tenses (present, present progressive and simple past). | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 43 | Basic 1 Communication | International students studying English as a foreign language study the fundamentals of English communication. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 50 | Basic 2 Listening/Speaking | On completing the Basic 2 Listening/Speaking course, a student will be able to follow instructions, directions, and comprehend the main ideas and supporting details of 1-3 minute announcements and conversations with controlled speech and delivery; and (2) speak informally in basic social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 51 | Basic 2 Reading/Writing | On completing the Basic 2 Reading/Writing course, a student will be able to (1) recognize main ideas, find supporting details, and recognize the organizational pattern in short and page-length reading passages; and (2) produce a composition, based on a model, with a personal point of view, demonstrating level-appropriate control of grammar, word form, and punctuation. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 52 | Basic 2 Structure | Learn grammar for everyday writing and speaking—present, progressive and future tenses, irregular verbs in the past tense, modal verbs, pronouns, order of adjectives, and comparisons. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 53 | Basic 2 Communication | Learn to communicate effectively at the basic level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |

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| GBL | 60 | Intermediate 1 Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of 1-5 minute listening passages, conversations, instructions, and directions with controlled speech and delivery; and (2) speak informally in common social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 61 | Intermediate 1 Reading/Writing | On completing this course, a student will be able to (1) recognize the main ideas and find supporting details in selected reading passages of a few pages; and (2) produce an organized composition, with a personal or an objective point of view, demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 62 | Intermediate 1 Structure | Improve grammar for everyday writing and conversation, present perfect and present perfect continuous and future tenses, noun clauses and grammar to cover frequency, duration, possibility and necessity. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 63 | Intermediate 1 Communication | International students studying English as a foreign language continue to build on the fundamentals of English communication, including working on vocabulary expansion, pronunciation, idiom decoding, fluency and verbal accuracy. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 64 | Intermediate 1 Business: Introduction | International students studying English as a foreign language, learn the fundamental vocabulary, concepts and cultural customs of business in an American context. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 70 | Intermediate 2 Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of 5-10 minute general topic listening passages with modified speech and delivery; and (2) speak formally and informally on a variety of general topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 71 | Intermediate 2 Reading/Writing | On completing this course, a student will be able to recognize the main ideas and supporting details and distinguish between fact and opinion in a reading passage of several pages; and (2) produce a composition, based on a writing task, with an objective point of view demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 72 | Intermediate 2 Structure | Focus on an overview of all the tenses. This course also covers passive voice and sequence of tenses with adverbial clauses. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 73 | Intermediate 2 Communication | Learn to communicate effectively at the intermediate level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 74 | Intermediate 2: Business Management | International students studying English as a foreign language discover key concepts and ideas related to business management. Students have the opportunity to speak, read and write about, as well as listen to, accessible levels of business management materials, including work and motivation, company structure and recruitment. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 75 | Intermediate American Culture Studies Special Topic | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 76 | Intermediate Bridge to ASU | | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 80 | Advanced 1 Listening/Speaking | On completing the Advanced 1 Listening/Speaking course, a student will be able comprehend the main ideas and supporting details of brief academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 81 | Advanced 1 Reading/Writing | On completing the Advanced 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details and determine logical inferences in selected general reading passages of several pages; and (2) produce a composition, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 82 | Advanced 1 Structure | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 90 | Advanced 2 Core Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of complex but abbreviated academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |

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| GBL | 91 | Advanced 2 Core Reading/Writing | On completing this course, a student will be able to (1) recognize the main ideas and supporting details, and determine logical inferences in authentic and selected academic and general reading passages of several passages; and (2) produce a well-developed essay, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 92 | Advanced 2 Structure | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 93 | Advanced Communication Special Topic | Learn to communicate effectively at the advanced level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 94 | Business English Special Topic | Learn to communicate effectively in a variety of business situations and develop English skills necessary for success in today's business world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 95 | Advanced American Culture Studies | Learn about American culture and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 96 | Academic English Studies Special Topic | Learn the Academic English necessary for success at an American university or college. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 98 | Professional English Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | X99 | International Teaching Assistants Training | Offered to international students who are candidates for a teaching assistantship. Non-credit semester-long seminar addresses language improvement, teaching skills and cross-cultural training. | N | LEC | Y | AUD | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 10 | Business English Communications I | This course is designed to introduce students to the challenges of the degree bearing MGM/MAGAM programs at Thunderbird. Each class focuses on a different language communication fundamental (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GBL | 11 | Business English Communications II | This course is a continuation of GBL 10 in that it further develops the students to meeting the challenges of the degree bearing MGM/MAGAM programs at Thunderbird. Students may enter into GBL 11 directly with a TOEFL score of 95 Internet-Based test or better. Each class continues to improve upon one or more of the different language communication fundamentals (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SB & G | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Elmtiry Ed |
| GCU | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | Credit is allowed for only HST or GCU 114 |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SB & G | |
| GCU | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |

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| GCU | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GCU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| GCU | 241 | The Global Economy in Transition | Production, distribution, and consumption of various types of commodities of the world and relationships to the activities of humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 15 hours |
| GCU | 253 | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 322 | Geography of U.S. and Canada | Spatial distribution of relevant physical, economic, and cultural phenomena in the United States and Canada. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 323 | Geography of Latin America | Spatial distribution of relevant physical, economic, and cultural phenomena in South, Middle, and Caribbean America. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as numerous analytical essays and an in-depth research paper, in addition to regular tests and quizzes, are required. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 45 hours |
| GCU | 325 | Geography of Europe | Broad and systematic overview of Europe, emphasizing physical, economic, and cultural phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 326 | Geography of Asia | Spatial distribution of relevant physical, economic, and cultural phenomena in Asia, excluding the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 328 | Geography of Middle East and North Africa | Spatial distribution of relevant physical, economic, and cultural phenomena in the Middle East and North Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 332 | Geography of Australia and Oceania | Spatial distribution of relevant physical, economic, and cultural phenomena in Australia, New Zealand, and Pacific Islands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 344 | Geography of Hispanic Americans | Examines the homelands, migrations, settlements, landscapes, roles, and selected cultural traditions of Hispanic Americans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 350 | The Geography of World Crises | Contemporary world crises viewed from a perspective of geographic concepts and techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 351 | Population Geography | Demographic patterns; spatial, temporal, and structural investigation of the relationship of demographic variables to cultural, economic, and environmental factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisites: MAT 117,119, 142, 170 or 210 with C or better; Credit is allowed for only GCU 351 or SBS 351 |
| GCU | 357 | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 359 | Cities of the World I | Historical evolution of urban patterns and structures in the Middle East, India, Southeast Asia, China, Japan, and Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | |
| GCU | 360 | Cities of the World II | Historical evolution of urban patterns and structures in Latin America, North America, Sub-Saharan Africa, and Australasia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 361 | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 364 | Energy in the Global Arena | Production, transportation, and consumption of energy, emphasizing the electric power industry and its environmental problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |

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| GCU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 414 | Teaching Geography Standards | Introduces Arizona Geography Standards for K-12 educators, emphasizing exciting curricula and illustrated with best practices by master teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 421 | Geography of Arizona and Southwestern United States | Geography of the Southwest with an emphasis on Arizona. Divided into physical geography, history, people, and economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 424 | Geography of Mexico and Middle America | Central America and Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 425 | Geography of the Mexican American Borderland | Geography of a binational and bicultural region. Examines settlement, boundary issues, ethnic subregions, population change, industrial development, and urban growth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or SB) & G | |
| GCU | 426 | Geography of Russia and Surroundings | Examines the geography of Russia and other post-Soviet states. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 432 | Geography of China | Examines the physical, economic, cultural, social, demographic, agricultural, political, historical, and environmental aspects of the geography of China. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 433 | Geography of Southeast Asia | Examines the biophysical and social features of Southeast Asian nations and peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 441 | Economic Geography | Spatial distribution of primary, secondary, and tertiary economic and production activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 442 | Geographical Analysis of Transportation | Networks, modes, economics, and flows at the urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 474 | Public Land Policy | Geographic aspects of federal public lands, policy, management, and issues. Emphasizes western wilderness and resource development problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GCU | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| GCU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GCU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GCU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 496 | Geographic Research Methods | Scientific techniques used in geographic research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisites: GPH 111, GCU 102, GCU 121 and GIS 205 with C or better |
| GCU | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GCU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GCU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |

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| GCU | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development; social data collection methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GCU 514 or SOS 514 |
| GCU | 515 | Human Migration | Economic, political, social, and geographic factors underlying population movements. Migration selectivity, streams and counter-streams, labor migration, and migration decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 529 | Contemporary Geographic Thought | Comparative evaluation of current philosophy concerning the nature and trends of geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 542 | Geographical Analysis of Transportation | Examines the geographical aspects of transportation systems. Looks at the geography of networks; transport costs and rates; different modes of transport, trade, economic development, and technology. Studies the movement of freight and passengers at the individual, urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 585 | Geographic Research Design and Proposal Writing | Prepares students to undertake creative geographic research culminating in the generation of new knowledge. Serves as a foundation for the student in achieving the objective of a productive and successful degree. To accomplish this, instruction stresses a research framework, ethical practice, and the generation of an original research proposal. Specific learning objectives are: to produce an area of specialization statement, literature review, problem statement, description of methods and final proposal; to develop the skills needed to conceive and plan a research project; to communicate ideas effectively in written and oral form; to develop and articulate informed opinions about research designs; to learn about academic publishing format and process; and to understand and engage in ethical research practices. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student |
| GCU | 586 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GCU | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GCU | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 596 | History of Geographic Thought | Historical development of geographic thought from pre-Greek days to the early 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 671 | Introduction to Geographic Teaching | Intensive course in geographic education, scientific method in research on geographic education, research trends, resources for teaching, best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 672 | Physical Geography for Teachers | Transfer of matter and energy exhibited in the Earth's climate, hydrology, soils, biogeography, and landforms; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 673 | Human Geography for Teachers | Analyzes cultural, economic, urban, historical, transportation, population, political, and development geography; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 674 | Geographic Techniques for Teachers | Introduces geographic techniques, including GPS, GIS, remote sensing, cartography, qualitative, and field methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 675 | World Geography for Teachers | Systematic overview of geographic knowledge about different world regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 676 | North American Geography for Teachers | Systematic overview of geographic knowledge about different North American regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 677 | Geography Across the Curriculum | Intensive course on intergrating reading, writing, and mathematics standards with geography content; selected case studies; best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GCU | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SB & G | |
| GCU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 253 | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 357 | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | 361 | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | 373 | Introduction to Geographic Information Science | Introduces theoretical and computer-based aspects of Geographic Information Systems, involving data analysis and map generation. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SG | Pre-requisite: PSY 230 or SBS 304 |
| GCU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |

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| GCU | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 101 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only GER 101 or 111 |
| GER | 102 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |
| GER | 110 | Intensive German I | Students learn to read, listen, write and speak German. Develops ability to communicate in German using a variety of tools. Uses German to ask and answer questions; name and describe persons, things, places and events; deals with certain situations; narrates orally and in writing; writes letters and postcards; fills out forms; and comprehends some texts. Expands knowledge of the cultures of the German-speaking countries. Students contribute to the class discussions what they might already know. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | G | |
| GER | 111 | Fundamentals of German | Primarily for students with two years of high school German who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |
| GER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| GER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 201 | Intermediate German | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 102 or 111 with C or better |
| GER | 202 | Intermediate German | See GER 201 | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 201 with C or better |
| GER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 310 | Advanced German Grammar | Intensive, contextualized advanced German grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 202 with C or better |
| GER | 311 | German Conversation | Expansion of idiom through oral practice dealing with contemporary articles, essays and stories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: GER 202 with C or better |
| GER | 312 | Readings in German Culture | Provides strategies for building reading proficiency in German through longer cultural texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 313 | German Composition | Intensive practice in writing, emphasizing style and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 315 | Germanic Mythology | Religious and spiritual beliefs and practices of the ancient Germanic peoples as reflected in their culture, including the pantheon of their gods, as well as the reception of these beliefs through and including contemporary times. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ENG 102, 105, or ENG 108 with C or better; Credit is allowed for only GER 315 or 394 (Germanic Mythology) |
| GER | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 412 | Advanced German | Improvement of writing and speaking ability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 313 with C or better |
| GER | 415 | German Civilization | Aspects of political, social, and cultural life of the German-speaking world from the beginning through 1600. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 416 | German Civilization | From 1600 through 1945. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 421 | German Literature Survey, 800-1800 | From the beginning to Classicism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): GER 312 with C or better; GER 313 with C or better |
| GER | 422 | German Literature Survey, 1800-Today | From Romanticism to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): 6 hours of 300-level German courses with C or better |
| GER | 431 | German Humor | Popular and literary texts (collections of jokes, pranks and comedies) in the print and visual media provide a basis of comparison for students to reflect critically on the function of humor in German culture from the sixteenth century until the present. Exposes the different types and functions of German humor and understands both the historical and the contemporary theoretical debate on the study of (German) humor. Taught almost exclusively in German, with reading and writing assignments done in the target language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Two 300-level GER courses with C or better; Credit is allowed for only GER 431 or 494 (German Humor and Comedy) |

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| GER | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| GER | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| GER | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| GER | 447 | German Modernism | Examines examples of modernism in literature, art and film from German-speaking Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only GER 447 or SLC 447 or GER 494 (German Modernism) |
| GER | 453 | German Literary Masterpieces on Film | Film and literature in their correlation to each other and to cultural, political, and social trends in German-speaking countries. Special arrangements for graduate students and those without a knowledge of German. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | |
| GER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| GER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| GER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| GER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 521 | History of German Language | Linguistic development of German from the earliest records to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 550 | German for Reading Knowledge | Teaches non-speakers of foreign language, or those with only basic notions of the language, how to read in a foreign language at an advanced level. Consists of a concise overview of grammar as well as reading comprehension practice for students who plan to take the Graduate Foreign Language Exam or others who would merely like to learn to read in a foreign language. Focuses only on reading and not on listening, speaking, or writing as in a traditional language course. | N | LEC | Y | GNA | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GER 494 (German for Reading Knowledge), GER 598 (German for Reading Knowledge), or GER 550 |
| GER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 201 | Spatial Thinking | Introduces spatial thinking, a cross-disciplinary foundation for geographic information science (the science of dealing with spatial/geographical data; their manipulation, interpretation and use in problem solving); geospatial technologies (the specific technologies underpinning geographic information science); and spatial analysis (the science of solving spatial problems). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GIS | 205 | Geographic Information Technologies | Introduces modern geographic information technologies, including cartography, GIS, remote sensing, global positioning systems, and statistical analyses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | |
| GIS | 211 | Geographic Information Science I | History and basic aspects of GIS including map and data file structure, conversions, and synthesis with a computerized environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | |
| GIS | 220 | Mathematical Principles in GIS | Covers the basic math principles needed to excel in GIS and spatial analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: MAT 265 (or MAT 270) with C or better |
| GIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 311 | Geographic Information Science II | GIS as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval, and graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | Prerequisite(s): GIS 211 with C or better |
| GIS | 321 | Programming Principles in GIS | Basic principles of programming for GIS in python covering data processing, analysis, and application development. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: CSE 110 |
| GIS | 322 | Spatial Data Structures and Algorithms | Fundamental data structures and algorithms for the integration, management, processing and analysis of geographically referenced data. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 321 |
| GIS | 341 | Introduction to Cartography and Georepresentation | Study and creation of maps. Fundamental mapping principles (projection, scale, generalization, symbolization) and computer-based cartographic production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): minimum 45 hours |
| GIS | 351 | Air Photo Interpretation | Subset, remote sensing, includes photography, films, aerial geometry, image components, stereoscopy, photogrammetry, ground truthing; interpret physical, cultural, economic, intelligence information. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): minimum 45 hours |
| GIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 412 | Spatial Decision Support Systems | Theoretical and technical requirements for implementing spatial decision support tools. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): CSE 110 with C or better; GIS 311 with C or better |
| GIS | 431 | Spatial Databases | Covers data modeling concepts, the relational data model for the storage and retrieval of spatial and nonspatial information. The data retrieval emphasizes the industry-standard query language SQL and Spatial Query Languages. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 311; GIS 322 |
| GIS | 441 | Geographics: Interactive and Animated Cartography and Geovisualization | Advanced cartography, stressing influence and application of the computer on geographic representation. Emphasizes creation of maps for the Internet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): minimum 45 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GIS | 461 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| GIS | 462 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): GIS 211 or 461. Credit is allowed for only GIS 462 or GIS 562 or PUP 482 or PUP 582 or PUP 598 (Location Modeling) |
| GIS | 470 | Statistics for Geographers | Statistical techniques applied to the analysis of spatial distributions and relationships. Introduces models and theory in geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s) with C or better: MAT 117 (or MAT 119, 142, 170, 210, 211, 251, 265 or 270) |
| GIS | 471 | Geographic Information Analysis | Basics of spatial data analysis. Topics include point pattern analysis, spatial autocorrelation, spatial regression, and kriging. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 470 |
| GIS | 472 | Spatial Regression Analysis | Students gain insight into the scope of spatial regression methods, apply them in an empirical setting, and properly interpret the results of spatial regression analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 471; Credit is allowed for only GIS 472 or GPH 598 (Spatial Regression) |
| GIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GIS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 501 | Fundamentals of Geographic Information Science | Covers the basic topics of Geographic Information Science research including scale, coordinate systems, data, analysis, remote sensing, geocoding, and mapping. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 505 | GIS for Planners | Provides concepts of Geographic Information Systems technology and how the technology is used in planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 512 | Spatial Decision Support | Designs and implements a spatial decision support system and analyzes and understands the theoretical underpinnings that form these systems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 412 or GIS 512 |
| GIS | 515 | GIS Workshop for Planners | GIS as a tool to address large, multifaceted planning problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIS 515 or PUP 576 |
| GIS | 521 | Geographic Information Science III | In-depth look at programming within GIS. Focuses on programming and methodology, utilizing specific software, and basic scientific computing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 531 | Spatial Databases | Advanced data modeling concepts, the relational data model for the storage and retrieval of spatial and non-spatial information. Data retrieval emphasizes the industry-standard query language SQL and spatial query languages. Covers research topics for graduate students. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 431 or GIS 531 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GIS | 561 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GCU 494 (Optimization Fundamentals) or GCU 598 (Optimization Fundamentals) or GIS 461 or GIS 561 or PUP 481 or PUP 581 |
| GIS | 562 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GIS 561; Credit is allowed for only GIS 462, 562, PUP 482, 582, or 598 (Location Modeling) |
| GIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | |
| GIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 601 | Introduction to Geographic Information Systems | Introduces GIS theory and practice for professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 602 | Intermediate GIS | Introduces visualization, spatial analysis and open source tools. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 603 | Spatial Statistics and Modeling | Introduces spatial statistics and modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |

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| GIS | 604 | Implementation in the Corporate and Public Sectors | GIS use in the corporate and public sectors including proposal development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 605 | GIS Project Planning and Implementation | Moving from project proposal to implementation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 606 | GIS Project Presentation | Development of technical reports and presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 610 | Programming the GIS Environment | Programming fundamentals for desktop GIS and custom applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 630 | GIS Technologies | Uses technology for GIS data collection and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: graduate MAS-GIS major |
| GIS | 640 | GIS for Business | Uses of GIS in business practice including site suitability, demographic data and business analyst. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 650 | GIS for the Internet | Programming GIS for the Internet and mobile applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 135 | Graphic Communications | Technologies and processes involved in the design, image generation, transmission, and industrial production of graphic information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 210 | Creative Thinking and Design Visualization | Fundamental methods, concepts, and techniques of creative thinking, design visualization, and problem solving, including communication and societal influences. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 211 | Introduction to Video Game Art | 2D and 3D art assets for video games. Areas covered: classic pixel art, seamless texturing and tiling, sprite animation, 3D virtual studio, box modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Credit is allowed for only GIT 211 or 294 (Intro to 2D-3D Video Game Art) |
| GIT | 215 | Introduction to Web Authoring | Graphic user interface planning and evaluation using industry-standard languages; graphics, color layout and file format considerations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |

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| GIT | 230 | Digital Illustration in Publishing | Raster and vector illustration in publishing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 237 | Web Content Design | User-centered design principles for visual content on the World Wide Web with emphasis on usability, page architecture, search engine optimization, coding, scripting and interactivity. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 215; GIT 230 or Prerequisite(s): BAS in Graphic Information Technology or BAS in Internet and Web Development student |
| GIT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 295 | Introduction to Technical Imaging | Explores imaging technologies utilized in industry. Covers basic imaging concepts, chip technologies, optics, motion analysis, high-speed video, thermal imaging, and science relating to light and latent imaging. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Undergraduate student; Credit is allowed for only GIT 295 or 294 (Introduction to Technical Imaging) |
| GIT | 303 | Digital Publishing | Web and print publication design and production using industry-standard composition software, proofing, and output devices. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development. |
| GIT | 312 | 3-D Computer Graphics Modeling and Representation | 3-D modeling applications: modeling for video games, mapping techniques, texturing, box modeling, geometric representation, strategies and assemblies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | CS | Pre-requisites: GIT 211 or GIT 294 (Intro to 2D-3D Video Game Art) |
| GIT | 314 | Multimedia Design, Planning and Storyboards | The creative process of generating ideas, conceptualizing projects, planning, designing, story boarding, and presenting interactive multimedia products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 210, GIT 215 and GIT 230 OR CST 200 and IFT 301 OR BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 315 | Digital Video Techniques | Covers video production, including planning, pre-production, production, post-production and online video technologies and how video is an integral part of the graphic information industry. Concentrates on commercial and client-driven video production. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 230; Credit is allowed for only GIT 315 or GIT 294 (Intro to Video Content) |
| GIT | 333 | Printing Technology | Theory and application of sheet and web press technology for offset-lithography, flexography, screen process, and digital printing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite: GIT 303 |
| GIT | 334 | Image Editing and Manipulation | Theory and application of advanced image editing and raster techniques for reproduction and dissemination. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 230 or Graphic Information Technology or Internet/Web Development BAS major |
| GIT | 335 | Computer Systems Technology | Computer technology: hardware, software, storage, networking, Internet, telecommunications, and information systems. Requires independent research. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Minimum 45 hours; Not for credit for the BS/GIT degree |
| GIT | 340 | Information Design and Usability | Design and technology solutions for increasing Website usability and methods of organizing information to improve the user experience. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): junior standing; Credit is allowed for only GIT 340 or GIT 494 (Information Design and Usability) |
| GIT | 384 | Commercial Photography | Digital image capture, and output in a commercial studio emphasizing publishing workflow. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 402 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic technology perspective. Emphasizes how, why, and when new media can be used to enhance a Web site and the user's experience. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 (or GIT 337) OR BAS student in Graphic Information Technology or Internet/Web Development. Credit is allowed for only GIT 402, 502 or 494 (New Media Internet Technologies) |
| GIT | 411 | Computer Animation | 3-D computer animation methods: rigging for video games, principles of animation, loops, skinning, blending, advanced modeling and motion. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 312 |
| GIT | 413 | Professional Portfolio Design and Presentation | Digital media portfolio design and production: planning, audience analysis, media selection, authoring, media formats, production, copyright considerations, marketing, and delivery. Requires capstone group project. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): Graphics Information Technology major; senior standing; GIT 303 |
| GIT | 414 | Web Site Design and Internet/Web Technologies | Web site design, authoring, standards, protocols, tools, and development techniques for commercial client-sided Web-based graphic information systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or BAS Applied Science (Graphic Information Technology) or BAS Applied Science (Internet & Web Development) major |
| GIT | 417 | Advanced Web Markup and Scripting | Industry-standard programming languages and techniques to create interactive graphic information Web sites and applications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or Applied Science (Graphic Information Technology) BAS or Applied Science (Internet & Web Development) BAS major; Credit is allowed for only GIT 417 or GIT 519 or GIT 598 (Advanced Internet Programming) |
| GIT | 418 | Multimedia Authoring, Scripting and Production | Production of multimedia projects using industry-standard authoring applications: client considerations and project documentation; user interface design, interactivity, media, and databases. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 417 |
| GIT | 432 | Graphic Industry Business Practices | Business practices related to press/prepress/Web industries; trade customs, cost analysis, marketing and management approaches. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Graphics Information Technology Senior student |
| GIT | 435 | Website and E-Commerce Strategies | Internet Web site management, security, marketing, and e-commerce business models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 414 |
| GIT | 437 | Color Reproduction Systems | Scientific analysis for the engineering of color reproduction systems and color models used in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 334 |
| GIT | 450 | Digital Workflow in Graphic Industries | Digital production system analysis for content creation, automation output of graphic information to print and Web, including networking and job tracking. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 333; GIT 237 (or GIT 337) OR BAS student in Graphic Information Technology or Internet & Web Development |
| GIT | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Minimum 90 hours; Pre/Co-requisites: GIT 413; GIT 432; Credit is allowed for only ETM, GIT or TMC 480 |
| GIT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | |
| GIT | 490 | Advanced Commercial Photography | Studio-based class focusing on set design, advanced photographic techniques, raw workflow, marketing, business, and digital rights management. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 384 |

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| GIT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| GIT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GIT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-7 | | |
| GIT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 502 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic information technology perspective. Emphasizes how, why and when new media can be used to enhance a Web site and the user's experience while maintaining branding cohesively across all technologies. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIT 402, 502 or 598 (New Media Internet Technologies) |
| GIT | 515 | Website Design and Technologies | Standards, tools and techniques for creating websites, with emphasis on designing for multiple devices and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only GIT 414 or GIT 515 or GIT 598 (Website Design and Internet/Web)s |
| GIT | 519 | Advanced Scripting for the Web | Uses industry-standard markup and scripting languages to develop interactive websites and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIT 417 or GIT 519 or GIT 598 (Advanced Internet Programming) |
| GIT | 538 | Personnel Development for the Graphics Industry | Employee training and development specific to production and management in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 540 | Cross-Media Design Solutions | Universal design theory, creative problem solving, and case study applications for print, Web, and new media products of the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 542 | Usability and User Experience | Design and technology solutions focusing on how information is organized graphically to communicate and how website usability is employed to improve human interaction with inline information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 573 | Color Metrology | In-depth study and analysis of systems used to manage color reproduction in the graphic arts industry and information technology. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Color Reproduction Systems) |
| GIT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Graphic Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 101 | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GLG | 102 | Introduction to Geology II (Historical) | Basic principles of applied geology and the use of these principles in the interpretation of geologic history. Both GLG 102 and 104 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & H | |
| GLG | 103 | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | |
| GLG | 104 | Introduction to Geology II-Laboratory | Lab techniques involving map interpretation, cross sections, and fossils. Both GLG 102 and 104 must be taken to secure SG general Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | Co-requisite: GLG 102 |
| GLG | 108 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| GLG | 110 | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & G | |
| GLG | 111 | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | |
| GLG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GLG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 301 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; GLG 101, GLG 102, GLG 110, GPH 111 or SES 121; MAT 117 or higher. Credit is allowed for only GLG 301, GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| GLG | 304 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| GLG | 305 | Dynamic Earth | Emphasizes the link between Earth's interior and surface, focusing on Earth systems and cycles, such as observation and modeling of the geometry and motions of Earth's rigid outer shell, the tectonic plates, and how they are coupled to the geologic record, the nature of Earth's internal structure, and convective motions within the planet. Specific topics include: (1) essentials of Earth's dynamic interior (models for physical and chemical evolution); (2) essentials of lithosphere evolution (cooling of oceanic plates, the age of the Earth, and continent formation); (3) multi-scale tectonics (plate tectonics, continental deformation, mountain building, tectonic context of metamorphism); (4) essentials of volcanism in a tectonic context; (5) geodynamic context of plate boundaries; and (6) chemical cycles (role of the solid crust and mantle for transporting, storing, and cycling water and minerals). Provides an essential global context for studies of Earth and Environmental Science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 181 or 182 or 281 or 282 or CHM 101 or 107 or 113 or 114 or PHY 101 or 111 or 121 or 150); GLG 101 or SES 121; MAT 170 or 171 or 210 or 251 or 265 or 270. Credit is allowed for only GLG 305 or GLG 310 |
| GLG | 310 | Structural Geology | Geologic structures and the mechanical processes involved in their formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 101 or SES 121 with C or better; MAT 170, 171, 210, 251, 265 or 270 with C or better; Credit is allowed for only GLG 305 or GLG 310 |
| GLG | 321 | Mineralogy | Crystal chemistry, crystallography, mineral identification, origin and occurrence of minerals, systematic mineralogy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | Prerequisite(s): CHM 113 (or both CHM 111 and 117 or 114) with C or better; MAT 170, 210, 265 or 270 with C or better; |
| GLG | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |

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| GLG | 327 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone—in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisites with C or better: GLG 101 & 103 or SES 121 & 123; MAT 170 or 171 or 210 or 251 or 265 or 270; PHY 101 or 111 or 121 or 150 or CHM 101 or 107 or 113 or 114 or BIO 100 or 181 or 182 or 281 or 282. Credit is allowed for only GLG 327 or SOS 374 |
| GLG | 362 | Geomorphology | Land forms and processes that create and modify them. Lab and field study of physiographic features. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 101 or SES 121 with C or better; MAT 266 or 271 with C or better |
| GLG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 400 | Earth and Space Exploration Colloquium | Presentation of recent research by faculty and guests. Written assignments required. 1 semester hour required for Geological Sciences majors; may be repeated for a total of 2 semester hours. | N | LEC | Y | YGB | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| GLG | 404 | Fundamentals of Planetary Geology | Surveys planetary topics, including impacts, tectonics, and volcanism on planetary objects, and use of spacecraft data, including geological mapping. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 101 (or GLG 102) or SES 121 (or SES 122) with C or better |
| GLG | 406 | Geology of Mars | Geological evolution of Mars through analyses of spacecraft data, theoretical modeling, and study of terrestrial analogs; emphasizes current work. Possible field trips to examine Arizona geology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 410 | Computers in Geology | Geological computer skills including data processing, visualization, presentation, numerical analysis, software and hardware applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Pre-requisites: GLG 101 or SES 121 with C or better |
| GLG | 418 | Geophysics | Solid earth geophysics; geomagnetism, gravity, seismology, heat flow. Emphasizes crust and upper mantle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: MAT 272 or 267 with C or better; PHY 131 and 132 or PHY 151 with C or better |
| GLG | 419 | Geodynamics | Emphasizes application of continuum principles to geological problems, including lithospheric stresses, heat transfer, fluid mechanics, and rock rheology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite(s): MAT 267 or MAT 272 with C or better; PHY 131 and 132 (or PHY 151) with C or better |
| GLG | 420 | Volcanology | Distribution of past and present volcanism, types of volcanic activity, mechanism of eruption, form and structure of volcanoes, and geochemistry of volcanic activity. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: Engineering, Math or Science major; Minimum Junior standing |
| GLG | 422 | Planetary Volcanology | Studies the effects of planetary environments and magma compositions on styles of volcanism and the nature of volcanic products on the terrestrial planets and outer planet satellites. Overview of volcanism on specific planetary objects, analysis of spacecraft image data, basic mathematical volcanic modeling, and reviews of key papers. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): AST 111 or AST 112 or GLG 101 or 102 or 110 or GPH 111 or SES 121; MAT 170 or MAT 171 or 210 or 251 or 265 or MAT 270 with C or better. Credit is allowed for only GLG 422 or GLG 494 (Planetary Volcanology) |
| GLG | 424 | Petrology | Origin of igneous and metamorphic rocks. Optical mineralogy, hand specimen identification, and thin-section analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 321 with C or better |
| GLG | 430 | Paleontology | Introduces concepts and analytical techniques in biogeology, paleobiology, paleoecology, and paleoenvironmental reconstruction from the fossil record. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 102 (or SES 122) with C or better; GLG 104 (or SES 124) |
| GLG | 435 | Sedimentology | Origin, transport, deposition, and diagenesis of sediments and sedimentary rocks. Physical analysis, hand specimen examination, and interpretation of rocks and sediments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: GLG 102 (or SES 122), 321 |
| GLG | 441 | Ore Deposits | Origin, occurrence, structure, and mineralogy of ore deposits. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites with C or better: GLG 101 (or SES 121); GLG 310 (or 321) |
| GLG | 451 | Field Geology I | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; Pre/Co-requisite: GLG 321 |
| GLG | 452 | Field Geology II | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; GLG 321 with C or better; GLG 451 with C or better |
| GLG | 455 | Advanced Field Geology | Geologic mapping in igneous, sedimentary, and metamorphic terrains of the Basin and Range province of Arizona. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | Pre-requisite: GLG 310 with C or better; Pre/Co-requisite: GLG 451 with C or better if completed |
| GLG | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| GLG | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and minerals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 464 | Solving Environmental Problems | Capstone course intended primarily for seniors in the Earth and Environmental Studies degree program. Hybrid self-study design project workshop guided by faculty, in which student teams research and develop plans for a viable solution to a real environmental problem in the American Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): Earth and Environmental Sciences BA seniors; GLG 305, 325 or 327 with C or better |

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| GLG | 470 | Hydrogeology | Geology of groundwater occurrence, aquifer and well hydraulics, water chemistry and quality, contaminant transport, remediation. Emphasizes quantitative methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| GLG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| GLG | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better. Credit is allowed for only GLG 485 or CHM 485 |
| GLG | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium-aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: CHM 302, GLG 321 or GLG 481 with C or better. Credit is allowed for only CHM 489, GLG 489 or 490 (Field Geochemistry) |
| GLG | 490 | Topics in Geology | Special topics in a range of fields in geology. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GLG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 495 | Undergraduate Thesis | Guided research culminating in the completion and presentation of an undergraduate thesis based on supervised research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| GLG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 500 | Earth & Space Exploration Colloquium | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 581 | Isotope Geochemistry | Geochemistry and cosmochemistry of stable and radioactive isotopes; geochronology; isotope equilibria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GLG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 101 | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| GLG | 103 | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | |
| GLG | 108 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| GLG | 110 | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG & G | |
| GLG | 111 | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GPH | 111 | Introduction to Physical Geography | Spatial and functional relationships among climates, landforms, soils, water, and plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | Credit is allowed for only GPH 111 or 411 |
| GPH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GPH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 210 | Society and Environment | Examines the interaction among social processes, key environmental issues, and nature's role as a resource at global and regional scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 211 | Landform Processes | Laboratory science class on earth-surface processes, with exercises emphasizing how erosion, transportation, and deposition modifies landforms. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | |
| GPH | 212 | Introduction to Meteorology | Fundamentals of weather and climate, including basic atmospheric processes and elements. Students whose curricula require a lab course must also register for GPH 214. Both GPH 212 and 214 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SQ | |
| GPH | 213 | Introduction to Climatology | Fundamentals of meteorological/climatological analysis, including terminology and symbology. Recommended for meteorology/climatology program students. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SG | |
| GPH | 214 | Introduction to Meteorology Laboratory | Introduces basic meteorological/climatological data and measurements. Suggested concurrent enrollment in GPH 212. Both GPH 212 and 214 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SQ | |
| GPH | 215 | Introduction to Climatology Laboratory | Fundamentals of meteorological/climatological map analysis and interpretation. Recommended for meteorology/climatology program students. May be taken concurrently with GPH 213. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SG | |
| GPH | 267 | Extreme Weather | Introductory survey of extreme weather and climate processes and the often disastrous consequences at the intersection of human operations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| GPH | 275 | Geography of Cyberspace | Focuses on the relationship between geography and human's use of (and creation of) Internet and communications technologies to interact with each other over space and time. Studies the cyberspaces that they produce and their impacts on the information society. Topics include cyberpunk and space in popular culture; computer spaces, virtual worlds, and gaming; mapping cyberspace; bots, crawlers, and viruses; cyberspace law; cyberspace as social media; historical cyberspaces; the Digital Divide; geographies of e-commerce; mobile cyberspaces; cyber-place; and code/space. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 314 | Global Change | Response of Earth's natural systems (atmosphere, hydrosphere, lithosphere, biosphere) to past environmental change, and effects of potential future changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & G | Pre-requisite: Minimum 45 hours |
| GPH | 381 | Geography of Natural Resources | Nature and distribution of natural resources and the problems and principles associated with their use. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 405 | Energy and Environment | Sources, regulatory and technical controls, distribution, and consequences of the supply and human use of energy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Minimum 75 hours; Credit is allowed for only GPH 405 or 505 |
| GPH | 409 | Synoptic Meteorology I | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: MAT 270 with C or better; Pre/Co-requisite: PHY 121 |
| GPH | 410 | Synoptic Meteorology II | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: GPH 409 with C or better |
| GPH | 412 | Physical Meteorology | Physical processes in the earth-atmosphere system on regional and global scales; concepts and analysis of energy, momentum, and mass balances. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 111, MAT 270, PHY 121 and PHY 122 with C or better. Credit is allowed for only GPH 412 or GPH 591 (Physical Meteorology) |

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| GPH | 413 | Meteorological Instruments and Measurement | Design and operation of ground-base and aerological weather measurement systems. Collection, reduction, storage, retrieval, and analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 213 with C or better |
| GPH | 414 | Climate Change | Surveys three climate research areas: paleoclimatology, theories (e.g., greenhouse warming), numerical modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Prerequisite(s): GPH 111 (or GPH 213 or 314) |
| GPH | 418 | Landforms of the Western United States | Studies landforms and geomorphic processes in the western United States, including lecture, topographical maps, aerial photographs, satellite imagery, and field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| GPH | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: BIO 181,GPH 111 or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| GPH | 433 | Alpine and Arctic Environments | Regional study of advantages and limitations of the natural environment upon present and future problems involving resource distribution, human activities, and regional and interregional adjustments. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Credit is allowed for only GPH 433 or 598 (Alpine & Arctic Environments) |
| GPH | 474 | Dynamic Meteorology I | Large-scale atmospheric motion, kinematics, Newton's laws, wind equation, baroclinics, vorticity, and the midlatitude depression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 271, PHY 131, PHY 132 with C or better |
| GPH | 475 | Dynamic Meteorology II | Topics in climate dynamics. General circulation, numerical modeling, teleconnection phenomena, and surface-atmosphere interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite: GPH 474 with C or better |
| GPH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GPH | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| GPH | 491 | Geographic Field Methods | Field techniques, including use of aerial photos, large-scale maps, and fractional code system of mapping; urban and rural field analysis to be done off campus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GPH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 511 | Fluvial Processes | Geographical aspects of processes of river erosion, transportation, sedimentation: emphasizing spatial characteristics of forces, resistance, landforms, sediment; includes computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP or GPH 535 |

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| GPH | 569 | Digital Analysis of Remotely Sensed Data | Focuses on the digital image processing of remotely sensed data for earth resource analysis and applications. Provides the skills and knowledge to apply digital remote sensing techniques for biophysical and environmental planning and problems. Through laboratory work, students have opportunities to practice concepts and techniques learned in the lecture part. Requires a reasonable background in college algebra and basic statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only GPH 394 (Digital Analysis of Remotely Sensed Data), 569 or 598 (Digital Analysis of Remotely Sensed Data) |
| GPH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 596 | Advanced Spatial Statistics | Multivariate and advanced statistical techniques including Box-Jenkins modeling and spectral analysis. Requires project papers and presentations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 101 | Designing Life | Helps students develop strategies to successfully navigate their education experience. Focuses on critical and reflective thinking. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 111 | Graphic Design History I | Surveys development of visual communication from its origins to the 20th century. Investigates significant technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| GRA | 112 | Graphic Design History II | Surveys contemporary and 20th-century graphic design. Investigates relationships among graphic design and related disciplines, technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 111 with C or better |
| GRA | 121 | Principles for Graphic Design I | Graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Graphic Design major. Corequisite(s): GRA 111 |
| GRA | 122 | Principles for Graphic Design II | Continued exploration of graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): GRA 121 with C or better; Environmental Design or Graphic Design major. Corequisite(s): GRA 112 |
| GRA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 220 | Design Drawing I | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for graphic design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 122 with C or better; Passed Milestone; Co-requisites: GRA 221; GRA 222 |
| GRA | 221 | Letterform | Drawing of letterforms with focus on proportion and structure. Introduces letterform nomenclature and classifications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 222 |
| GRA | 222 | Visual Communication I | Theoretical and applied studies in shape, drawing, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 221 |
| GRA | 223 | Typography | Theoretical exercises in spatial and textural qualities of type. Problems in tension, activation, and balance. Exercises in simple typographical applications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 221 with C or better; Co-requisite: GRA 224 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GRA | 224 | Visual Communication II | Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 222 with C or better; Co-requisite: GRA 223 |
| GRA | 225 | Communication/Interaction Design Theory | Theory related to the design of communication artifacts and interaction within various media environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 321 | Technology for Design I | Explores the process of technology in design. Projects interface with GRA 361. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design student; Co-requisite: GRA 361 |
| GRA | 322 | Technology for Design II | Emphasizes advanced technology in design problems. Projects interface with GRA 362. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 321 with C or better; Co-requisite: GRA 362 |
| GRA | 345 | Design Rhetoric | Develops critical thinking and expression of ideas in concise and persuasive written and spoken form. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Architecture, Digital Culture (Design), Design Studies, Environmental Design, Graphic Design, Industrial Design, Interior Design, Landscape Architecture major |
| GRA | 361 | Visual Communication III | Explores methodologies of strategic communication, development of visual systems, and information design ideation processes leading to applied projects in print and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 223 & 224 with C or better; Co-requisite: GRA 321 |
| GRA | 362 | Visual Communication IV | Comprehensive studio projects with emphasis on production processes leading to multidisciplinary applied projects in print, 3-D space, and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 361 with C or better; Co-requisite: GRA 322 |
| GRA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 401 | Creative Environment | Explores and investigates theories of the psychology of space, psychology of people in space, and the psychology of objects as it pertains to creativity and the creative environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 421 | Exhibit Design | Familiarization with the processes associated with the design of exhibits, especially visual communication in 3-D. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 422; GRA 461 |
| GRA | 422 | Motion Graphics and Interaction Design | Discusses and explores theory related to the design of motion graphics and interaction through lectures and studio projects. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 322 with C or better; Co-requisites: GRA 421; GRA 461 |
| GRA | 423 | Advanced Interaction Design | Advanced discussion and exploration of theory related to the design of interaction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 |
| GRA | 424 | Advanced Media | Advanced exploration of digital media for communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 with C or better |
| GRA | 440 | Finding Purpose | Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 461 | Visual Communication V | Comprehensive studio projects with emphasis on design processes, including research, writing, critical thinking, practice, presentation, and analysis. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 421; GRA 422 |
| GRA | 462 | Visual Communication VI | Comprehensive studio projects pursued in cooperation with a public organization or private enterprise. All projects culminate in an exhibit. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 461 with C or better; Co-requisites: GRA 423; GRA 424 |
| GRA | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| GRA | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| GRA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisite: GRA 461 |
| GRA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| GRA | 501 | Creative Environment and Collaborative Leadership | Explores and investigates creativity and group collaboration leadership as it applies to the creative process. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): graduate Herberger Institute for Design and the Arts major |
| GRA | 521 | Advanced Visual Communication Design Studio I | Students translate data, stories and references that they collect in their research into masterful visual narratives. This studio is an inquisitive environment for exploring ways to frame information and weave stories with graphic design. Students acquire new knowledge as individuals and as a group. Emphasizes studio-based research, conceptual development and articulation of process, voice and a high level of design execution. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Visual Communication Design major. Credit is allowed for only GRA 521 or GRA 590 (Advanced Visual Communication Design Studio I) |

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| GRA | 522 | Advanced Visual Communication Design Studio II | Encourages students to develop a framework for understanding the role of design systems, tools and objects as cultural artifacts and their reflection on social diversity. In particular, students focus on the cultural experience of collaborative consumption as it is fostered through visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 521. Credit is allowed for only GRA 522 or GRA 590 (Advanced Visual Communication Design Studio II) |
| GRA | 526 | Visiting Designers | Series of workshops (three per semester) in which students work closely with professionals and scholars in design and related disciplines. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 561 | Methods in Visual Communication I | Introduces methodology in visual communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 562 | Methods in Visual Communication II | Advanced theories and methodologies in visual communication. Emphasizes visual search as the synthesis of theory and practice. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: DSC 561 with C or better |
| GRA | 563 | Thesis Document Design | Emphasizes the construction of the final thesis document as a visual communication object and/or medium. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |
| GRA | 581 | Internship in Teaching Design | Develop assignments, conduct critiques, structure dialogue, make presentations, and assist in the instruction of studio and lecture courses. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |
| GRA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 621 | Advanced Visual Communication Design Studio III | Structured around the Design School traveling-studio model, this studio challenges students to work together to identify new design opportunities. For approximately one week during the semester, students travel to an off-campus location to examine a local condition there for which new design solutions are needed. Students return to ASU and continue working on the project for the semester. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 522 |
| GRA | 622 | Advanced Visual Communication Design Studio IV | As a culmination of study at the master level, the student is responsible for the development of an individually determined, semester-long project in response to defined objectives, periodic commentary by committee, and formal review. Students meet regularly with a faculty member to discuss assignments. Final faculty review and project book containing a written as well as graphic theoretical component are the forms of final presentation for this contribution to the field of visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 621 |
| GRA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Graduate Education | Graduate Education | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | Z1 | Graduate Education | Graduate Education | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRK | 101 | Elementary Ancient Greek | Ancient Greek grammar and vocabulary with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| GRK | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| GRK | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |
| GRK | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GRK | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 201 | Intermediate Ancient Greek | Continuation of GRK 101. Ancient Greek syntax and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: GRK 101 with C or better |
| GRK | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| GRK | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| GRK | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 301 | Ancient Greek Literature I | Readings in ancient Greek prose; advanced grammar. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 201 with C or better |
| GRK | 302 | Ancient Greek Literature II | Continuation of GRK 301. Readings in ancient Greek poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 301 with C or better |
| GRK | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| GRK | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| GRK | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| GRK | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRK | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRK | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| GRK | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| GTD | 501 | Global Technology and Development | Major theories of economic, political, and social development, with particular emphasis on the impact of current technologies and globalization. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 503 | Technology and the International Political System | Historical development of international political system, with emphasis on role of technology. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 504 | Technology and Development in Zones of Conflict | Examines the special context of technology and development in zones of conflict that face wars among other nations, civil strife and dramatic political change. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 505 | Research Design in Technology and Development | Emphasizes techniques of primary data collection, effective uses of secondary sources, for qualitative and quantitative applications. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 506 | Quantitative Analysis in Technology and Development | Uses correlation and regression-based multivariate statistical approaches in development studies. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 507 | Technology and Development in The Middle East | Examines historical and current patterns of political and socioeconomic development in the Middle East, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 507 or GTD 598 (Political Development in the Middle East) |
| GTD | 508 | Technology and Development in Latin America | Examines historical and current patterns of political and socioeconomic development in Latin America, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 508 or GTD 598 (Technology and Development in Latin America) |
| GTD | 509 | Technology and Development in North Africa | Examines historical and current patterns of political and socioeconomic development in North Africa, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 509 or GTD 598 (Technology and Development in North Africa) |
| GTD | 510 | Technology and Development in Sub-Saharan Africa | Examines historical and current patterns of political and socioeconomic development in Sub-Saharan Africa, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 510 or GTD 598 (Technology and Development in Sub-Saharan Africa) |
| GTD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 100 | Introduction to the Science of Health Care Delivery | Introduces the science of health care delivery in the United States. Presents basic concepts in health services, health care organizations, and the delivery of safe, accessible, high-quality health care. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | |
| HCD | 101 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| HCD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HCD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | CS | Prerequisite(s): completion of General Studies MA requirement with C or better; minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| HCD | 302 | Health Care Management | Broad concepts and skills of management; application of these techniques to health care organizations. Students appreciate the variability of management styles and personalities and begin to develop their own style. Solidifies concepts through the use of case studies and asynchronous discussion boards. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: ECN 212; HCD 100 |
| HCD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 402 | Health Economics | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 100 or MED 100; minimum 45 hours |
| HCD | 405 | Health Technology | Develops essential skills in identifying, analyzing and evaluating information technology applications in health care. Examples include electronic health records, computerized prescriber order entry, and computerized clinical decision support. Discusses the use of health technology in a variety of care settings, including outpatient and inpatient, and facilitate access to health care in resource-poor communities through the use of efficient technology. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 100 or HCD 101 or MED 100; HCD 300 and HSC 330 |
| HCD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HCD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| HCD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| HCD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 502 | Health Care Systems and Design | Introduces direct health care delivery structures and processes within and across health care settings, and their impact on the patient, family and community experience of the health care system and services. Examines the interaction among people, resources, delivery systems and built environments using perspectives, tools and strategies from multiple disciplines to evaluate strengths, gaps and opportunities for system improvements. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 510 | Interdisciplinary Approaches to Promotion of Healthy Lifestyles | Focuses on application of interventions to promote healthy lifestyles. Includes the theoretical and empirical foundations for clinical evidence for the implementation of healthy lifestyle interventions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HCD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BMD 511 or HCD 511 |
| HCD | 520 | Interdisciplinary Perspectives on Health Disparities and System Access | Presents minority health and health disparities concepts and practices from an applied and action-oriented perspective for clinicians and administrators in order to transform systems of inequality and increase access and quality of care for ethnic minorities and other vulnerable populations. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 521 | Law and Health Promotion | Analyzes case studies which illustrate the impact of policy and law on health promotion strategies and health outcomes. Includes discussions of the theoretical foundations supporting legal, ethical and economic decision making related to health promotion and real-world examples of the impact of current policies. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 531 | The Health Care System | Health care delivery in the United States, including its composition, function and historical organization. The broad discipline of health services systems, health care organizations, and the delivery of safe, accessible, high-quality health care. Discusses the health care system from the perspective of various patient populations, including the aging patient population. Examines the influence of health care reform on health care delivery and costs. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 532 | Health Care Management | Explores all aspects of managing health care organizations to provide high-value care (better outcomes at lower costs), including human resources, credentialing, finance, supply management, project management. In addition, students appreciate the variability of management styles and personalities and begin to develop their own styles. Solidifies concepts through the use of case studies from health care and other industries. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 540 | Seminar in Science of Health Care Delivery | Provides an introduction to the science of health care delivery, an exciting field that focuses on how to achieve the quality care that providers want to deliver and patients expect to receive. Too often quality care is compromised by inadequately designed systems of care. Provides an overview of the health care delivery system and then introduces the major components of the field. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 550 | Capstone: Applied Project | Discusses the results from student capstone projects, done in teams, and these projects related to broad topics explored during the prior coursework in the program. Capstone projects are identified early in the master's program in conjunction with and overseen by the degree leaders and the industry partners, and often a health care organization or health agency. These projects are worked on through the year with final written and verbal reports due in the last half of the semester. | Y | RSC | Y | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s) with C or better: HCD 502, 540 |
| HCD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |

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| HCD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | GRD | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-15 | | |

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| HCD | 301 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 or MED 100. Credit is allowed for only HCD 301 or MED 450 |
| HCD | 303 | Global Health Care Systems | Examines health care delivery systems internationally and explores contemporary issues affecting the institutions that provide health care and the people who seek health services. Covers the historical development of international health care systems, the organization and financing of systems of care, and the policy process and priority setting. Also covers current efforts at health care reform. Provides students with the necessary professional skills to be effective participants in efforts to evaluate and improve the delivery of health care nationally and internationally. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 100 or HCD 101 or MED 100 or PBH 100 |
| HCD | 305 | Public and Community Health | Provides a broad survey of national, state and local community health sciences and services including cultural and ethnic issues. Examines the concepts of health and wellness and introduces health education as a foundation for population-based health care. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 100 or HCD 101 or PBH 100 |
| HCD | 400 | Interpreting the Scientific Literature | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100; HCD 300; MAT 210 |
| HCD | 403 | Process Engineering | Core concepts in process engineering, specifically related to systems improvement and patient safety. The Institute of Medicine (IOM) advocates for integrating process engineering within health care to optimize health care outcomes. The IOM addresses multiple dimensions of health, including efficiency, effectiveness, safety, equity, patient-centeredness and access. These domains provide the framework from which faculty approach course content. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 and 101; HSC 300 and 330 |
| HCD | 404 | Advanced Concepts in the Science of Health Care Delivery | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 301 and 402; HSC 330 |
| HCD | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| HCD | 444 | Science of Health Care Delivery Internship | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | RSC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 300, 301 and 400 |
| HCD | 501 | Health Behavior and Statistical Tools in Health Environments | Provides an understanding of the statistical tools and principles of research design and methods in health behavior research in health environments. Encompasses an overview of quantitative, qualitative and mixed designs and focuses on the interpretation and communication of health behavior research through published reports and presentations. Incorporates research approaches and methodologies utilized in an array of content areas. Helps students gain a strong conceptual understanding and application of the statistical tools and research methods used to answer research questions of interest to health and health behavior researchers; it does not focus on mathematical treatments of underlying assumptions and formulae and related statistical problems sets or exercises. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 311 | Introduction to Health Care Innovation: Foundational Concepts | Organized around the Seven Pillars of Innovation: innovation process, leadership structure, outcomes, evidence-based practice, finance, policy, and technology and communication. Provides basic definitions and principles of innovation in addition to characteristics, skills and knowledge required for the innovator. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours |
| HCI | 313 | Philosophy of Science in Health Care: Understanding Paradigms of Health and Healing | Philosophy of science and its application to health and healing paradigms. Employs selected schools of thought and individual philosophers within philosophy of science to closely examine health and healing paradigms. Discusses concepts such as "life" and "death". Explores questions: What is science? What is health? Examines the way in which philosophy of science informs perceptions and definitions of health and healing in individuals and populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any PHI course with C or better; minimum 45 hours |

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| HCI | 412 | Transforming Health Care: A Systems Perspective for Innovation | Basic elements of systems thinking as a framework for innovation in addressing current and future issues in health care. Focuses on what occurs at the intersection of disciplines as being fundamental to transforming health care. Stresses the importance of collaboration to the systems perspective, in addition to the value of individual worldviews. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 421 | Health Care Policy: The Innovator's View | Innovation perspective on policy decision making in the health care environment. This perspective views policy-making as a fluctuating, dynamic and evolving process as seen through a lens of innovation principles. Explores the relationship between politics and policy and discusses factors influencing policy development. Identifies methods to formulate and implement policy and presents models to evaluate, analyze and modify health care policy. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 425 | Facilitating Innovation to Achieve Outcomes | Principles of facilitation that promote and enable the implementation of innovation to achieve outcomes. This approach identifies facilitation as requiring input seeking, ongoing evaluation, and emergent correction of an existing plan of action. Discusses characteristics of effective teams, innovation leadership behaviors that impact change, and involvement of end-users. Compares and contrasts traditional project management processes with innovative facilitation techniques. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 428 | Technology: A Tool to Advance Innovation in Health Care | Analyzes the role of technology in achieving the Triple Aim: improved quality, improved patient experience, and decreased cost. Discovers tools that are defined as health information technology and those that support business services. Compares and contrasts tools of technology that hold the potential to advance innovation in health care. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 538 | Innovation and the Individual | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 540 | Understanding and Applying Principles of Evidence-Based Practice | Understanding how application of evidence-based practice principles assists healthcare professionals to provide the best care. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to the Masters of Healthcare Innovation |
| HCI | 542 | Systems Thinking in a Complex Environment | Examines basic and advanced systems principles as they relate to national and international health and healing systems. Specific emphasis is given to systems thinking from a complexity science perspective and the implications for innovation. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 543 | Approaches to Leading Health Care Innovation | Theory-based survey course introduces approaches to lead innovation in an organization. Many change initiatives are designed by those not completing the work, leaving workers isolated, restricted and powerless. Teaches health care leaders to value collaboration with and seeking input from those who will carry out the work. Analyzes approaches to planned change: positive deviance, appreciative inquiry and creation of a learning organization. Students construct a change plan using an appropriate approach to address a health care problem. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Innovation Leadership certificate program |
| HCI | 544 | IT for Healthcare Innovation | Focuses on the information technology (IT) trends and their strategic application in healthcare. Students develop an IT strategy that addresses a specific healthcare area of concern. Students gain an understanding of the role of IT in healthcare innovation and develop skills in business process improvement, change management, strategy definition, value proposition, responding to feedback and managing resistance. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 545 | Public Speaking for Innovation: Building Your Presence and Making the Case for Change | New ideas take a lot of explaining, and innovation often involves persuasion. Builds presence as a speaker and a leader--and gains expertise in public speaking for innovation. Public speaking for innovation is a combination of finding and building one's presence as a speaker and a leader--and translating that to an ability to explain and persuade, making the case for change. Students build their presence and gain the foundational knowledge necessary to successfully explain and persuade in innovation contexts. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Innovation Leadership certificate program |
| HCI | 546 | Communication, Technology, and Innovation | Overview of traditional, contemporary and innovative communication strategies in the 21st century. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Master of Healthcare Innovation major |
| HCI | 548 | Advanced Principles and Concepts of Innovation | Explores and analyzes the innovation in complex systems, focusing on developing specific skills for successful innovations. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 550 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy, emphasizing strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 552 | Financing for Innovation | Provides an overview of healthcare economics; develops budgeting, planning, and management skills; and culminates in financial analysis skills necessary to facilitate management decision making or writing business plans or grant proposals. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 554 | Outcomes Evaluation | Outcomes measurement, management, and evaluation for healthcare practitioners and/or leaders. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |

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| HCI | 561 | Innovation Methods | Capstone project to learn the active skills of healthcare innovation using an adapted IDEO model. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 562 | Capstone Innovation Project II | Introduces the process of conceptualizing an innovation and building a plan or proposal to move forward with the innovation in either an entrepreneurial or intrapreneurial context. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 563 | Capstone: Final Innovation Project | Applies the concepts learned in MHI core courses and presents evidence of knowledge in innovation principles, applications and strategies for implementation and evaluation. Develops an innovation project in the form of a mindmap. Provides a comprehensive methodology for completing all aspects of an innovation opportunity. Student-directed demonstrations of the application of learned leadership skills and techniques for facilitating team and individual implementation. | N | SEM | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 570 | Innovation Proposal: Culminating Experience for Health Care Innovation Certificate | Applies concepts learned and operationalizes skills acquired throughout the Health Care Innovation certificate. Students envision emerging paths toward an outcome by first presenting a problem they have identified within a health care organization, and creating collaborative relationships and developing strategies to initiate change in their chosen setting. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 538; HCI 542; HCI 554; HCI 561 |
| HCI | 571 | Health Care Innovation Leadership Portfolio: Culminating Experience | Examines and applies personal leadership potential. Focuses on the effective development and facilitation of human networks to advance innovation in the health care space. Challenges students to appraise and analyze personal leadership strengths, challenges and opportunities. Explores strategies to evaluate students' current networks; develops the students' emergent professional networks. Gives focus to building relationships necessary to advance innovation in the health care space. Students develop and implement an action plan to advance their personal leadership growth and network utilization. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 538; HCI 543; HCI 545; NLM 562 |
| HCI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 210 | Clinical Health Care Ethics | Healthcare ethics emphasizing analysis and ethical decision making at clinical and health policy levels for healthcare professionals. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisite: ENG 102,105 or 108 |
| HCR | 220 | Introduction to Nursing and Health Care Systems | Introduces the social, political, and economic contexts in which the nursing profession and health care systems in the United States evolved. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | H | |
| HCR | 230 | Culture and Health | Cultures of diverse groups and health/illness. Cross-cultural communication, awareness of own cultural influences, indigenous and alternative healing practices. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | C & G | |
| HCR | 240 | Human Pathophysiology | Chemical, biologic, biochemical, and psychological processes used in study of structural and functional alterations in health with selected therapeutics. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s) with C or better: BIO 201 and 202; CHM 101 or higher; MIC 205 and 206 |
| HCR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 301 | Research Methods for the Health Care Professional | Explores basic concepts of qualitative and quantitative research design utilizing methods of assessment, planning, implementation and evaluation. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): STP 226 or PSY 230 or SOC 390 or SWU 321 with C or better; TWC 347 or 362 with C or better |
| HCR | 302 | Social Determinants of Health | Addresses issues of social determinants and health disparities at the local, national and global levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): TWC 347 or 362; Corequisite(s): HCR 301 |
| HCR | 303 | Assessing Needs, Assets and Capacity for Health Education | Assesses needs, assets and capacity for health education at the individual, family and community levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): CDE 232 with C or better; HCR 210 and 230 with C or better |
| HCR | 330 | Fundamentals of Community Health | Provides a framework for understanding community health concepts. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 210, 220, 230 with C or better |
| HCR | 331 | Communication within Communities | Focuses on the integral nature of communication in health care, including the role communication plays in shaping individual, social and cultural beliefs and expectations about health. Provides skills for effective communication when working with individuals, groups and the media. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 210, 220, 230, 240 with C or better; PSY 230 or SOC 390 or STP 226 or SWU 321 with C or better |
| HCR | 335 | Program Development and Management for Community Health | Incorporates models, research and resource management to plan, strategize and evaluate community programs that promote healthy lifestyle choices in various, as well as specific, geographic communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better; TWC 347 or TWC 362 with C or better |
| HCR | 336 | Environmental Community Health | Examines the interdependent relationship between the health of the environment and the health of communities. Includes a focus on specific communities, as well as agencies and laws involved in the health of communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better |

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| HCR | 340 | Foundations of Integrative Health | Discusses the similarities and differences of the biomedical and integrative health care systems providing an overview of integrative health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): ENG 102, 105, 108 or FYC MET |
| HCR | 341 | Biological, Manipulative, and Body-Based Therapies | Analyzes the principles and practices of select biological and body-based therapies and modalities and their use in the health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any BIO course; any CHM course |
| HCR | 342 | Mind-Body and Energy Therapies and Modalities | Analyzes the principles and practices of select mind-body and energy therapies and modalities and explains and distinguishes their use in the health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any BIO course; any CHM course |
| HCR | 343 | Historical and Cultural Foundations of Integrative Health Care | Distinguishes commonalities and differences between early healing traditions and investigates the utility for today's health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |
| HCR | 350 | Introduction to Clinical Research | Provides an introduction to the biomedical and clinical research field and associated operational processes. Examines clinical trial development phases, regulatory protections for human subjects, clinical research team specializations, research organizations, good clinical practice, institutional review board functions, and research funding mechanisms. Explores specialized career positions for nursing and allied health professionals. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HCR 350 or 394 (Introduction to Clinical Research Management) |
| HCR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 400 | Evidence Based Practice for the Health Care Professional | Methods of clinical and scientific inquiry. Focuses on the application of an evidence-based practice approach. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 301; TWC 347 or TWC 362 |
| HCR | 402 | Advocacy for Health and Health Education | Discusses and analyzes existing or proposed policies on health and strategies for influencing the policy-making process. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 303 with C or better |
| HCR | 406 | Health Literacy for Health Care Professionals | Prepares students to use best practices for health communication that promote consumer health literacy. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 210 or HSC 320 with C or better; HCR 230 or HSC 210 with C or better; Pre or co requisite(s): HCR 301 with C or better |
| HCR | 430 | Foundation to Health Care Systems | Explores the impact of the current U.S. health care system on the health of individuals, families and communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better |
| HCR | 435 | Leaders in Community Health | Prepares students to assume a leadership role in health promotion in communities. Lecture. Prepares students to assume a leadership role in health promotion in communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better; HCR 335with C or better; Pre- or co requisite(s): HCR 430 with C or better if completed |
| HCR | 439 | Community Health Seminar | Provides the opportunity to explore the health status of communities and to develop strategies for community health improvement. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s) with C or better: HCR 330, 331, 335, 336. Pre- or corequisite(s): HCR 430, 435 with C or better if completed |
| HCR | 440 | Interprofessional Approaches to Integrative Health Care | Prepares learners to develop and lead interprofessional teams with a focus on roles and responsibilities of integrative health care providers and practitioners. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |
| HCR | 441 | Legal and Ethical Issues Impacting Integrative Health Care | Examines current laws, government regulations, ethical principles and case studies to understand issues and consumers' use of integrative modalities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |
| HCR | 449 | Integrative Healthcare Capstone | Capstone course allows the student to demonstrate a culmination and synthesis of integrative health care body of knowledge by focusing on a single healing environment project. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340; 341; 342; 343; 400; 440 with C or better. . Pre- or corequisite(s): HCR 441; TWC 443 |
| HCR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| HCR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| HCR | 545 | Foundations of Biospecimen Repository Administration | Examines the biospecimen repository industry from a business perspective. Students learn the scientific basis, collaborative nature, required personnel, timelines and processes that underlie the business environment of biospecimen repositories and their administration. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Biospecimen Repository Administration certificate program |
| HCR | 546 | Management of Biospecimen Repository Operations | Examines the biospecimen repository industry from an operational perspective. Students learn the process aspects of repository start-up through collection, maintenance and disbursement of specimens. Key elements include personnel training, planning, quality control, risk management, project management and safety implementation. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 547 | Biospecimen Resource and Technology Management | Examines the biospecimen repository industry from a technology and resource perspective. Students learn the planning and selection of technology and resources for the support of the start-up and long-term maintenance of a biospecimen repository. Key elements include technology and resources assessment and choice, cost-benefit analysis, initial budget, long-term and short-term planning. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |

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|---------|-------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-----------------------------|------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| HCR | 548 | Regulation and Ethics in Biospecimen Repository Administration | Examines the biospecimen repository industry from an ethical and regulatory perspective. Students learn the ethical and consenting challenges of biospecimen collection, storage and disbursement. Examines relevant historical case histories to inform current policies and practices. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 549 | Scientific Innovation and Biospecimen Repository Administration | Explores the driving effects of scientific innovation on biospecimen administration management. Students learn how scientific advancements increase the demand of high-quality biospecimens and high-quality data, referred to as next-generation biorepository research. Examines tracking pre-analytical variables, adequate preservation and storage methods, controlled biospecimen and data custodianship, governance with ethical and scientific oversight of operations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 551 | Clinical Research Monitoring | Introduces clinical trial monitoring processes and procedures. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing major |
| HCR | 552 | Medical Device Development and Regulation | Comprehensive examination of the regulatory framework for the design, development, approval/clearance and marketing of medical devices in the United States throughout the product lifecycle. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management or MS Regulatory Science and Health Safety major |
| HCR | 553 | Quality Assurance and Clinical Research | Explores basic quality assurance techniques, standards and applications in the clinical research arena. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Clinical Research Management major or certificate |
| HCR | 554 | International Regulatory Affairs | Principles of international regulatory affairs and requirements for marketing regulated products globally. Key regulations that relate to medical product safety, the origins of these regulations, and marketing applications in major foreign markets. Covers similarities and differences among global regulations and those in the United States. | N | LEL | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing Regulatory Science & Health Safety student |
| HCR | 555 | Pharmaceutical Safety and Risk Management | Comprehensive examination of regulatory, legal, and scientific factors in pharmacovigilance and risk management and risk mitigation. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 557 | Clinical Research Design and Methods | Explores basic clinical trial biostatistical methods in concert with clinical trial design and methods. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing or Clinical Research Management (Grad Certificate) |
| HCR | 558 | Technical Writing for the Regulatory Professional | Focuses on teaching and applying writing and presentation skills critical for regulatory professionals | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 559 | Regulatory Science Internship | Internship in the field at a regulatory agency or in a regulated industry. Practicum. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 560 | Regulatory Science Capstone | Culmination course integrating all components of regulatory core courses demonstrating knowledge and competency in the field of regulatory science. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 561 | Responsible Conduct of Clinical Research | Introduces concepts and policies for the responsible conduct of research (RCOR), institutional review boards, and dissemination of findings. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 562 | Clinical Research Data Management and Technology Implementation | Orientation to database design and management, technology assessment methods, auditing procedures for continuous quality improvement (CQI), and cost-effectiveness analysis (CEA). | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 563 | Fundamentals of Regulatory Affairs | Principles of clinical research management and regulatory affairs. Overview of national/international regulatory systems and agencies, and trends in conducting clinical research. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 564 | Capstone Clinical Research Management Project | Culmination course integrating all components of CRM core courses demonstrating knowledge and competency in designing and managing clinical trials. Students must have documentation of unencumbered professional license in the state where the capstone project will be completed, if required. | N | REC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Master of Science or Clinical Research Management Certificate student |
| HCR | 565 | Clinical Research Operations | Development, implementation, and operations of FDA clinical research trials, including budgeting, contract negotiations, site evaluation, marketing, project management, and reporting. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 566 | Capstone Clinical Research Management Project II | Culmination course integrating CRM degree coursework by demonstrating knowledge and competency in clinical research management planning, operations, and implementation processes. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 567 | Research Management and Contemporary Research Topics | Management and leadership principles integrated with contemporary research topics will be introduced. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Masters student or Nursing Graduate student |
| HCR | 568 | Healthcare Project Management | Designed for graduate students and managers who desire to improve their effectiveness as project managers in the healthcare context. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 570 | Introduction to International Health Systems, Professions, and Research | Introduces systems of international healthcare delivery, professions that provide healthcare delivery, and international research principles and practices. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 571 | Cultural Diversity and Healthcare Delivery | In-depth exploration of culturally diverse aspects of population health, including culture-bound syndromes, folk practices, assessment approaches, and interactions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 572 | International Healthcare Delivery Capstone | Culminating course integrating all International Health requirements that produce culturally responsive implementation and evaluation plan for the student's clinical practice. A portion of the course will be held in Mexico. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HCR | 574 | The Institutional Review Board (IRB) and Human Research | Analyzes the value and functions of the Institutional Review Board (IRB), including the basis for the IRB's authority and the regulations that govern an IRB's activities. Topics include IRB operations and ethical issues. Explores the historical basis for regulating research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 561 |
| HCR | 575 | Contracting and Budgeting for Industry-Sponsored Clinical Trials | Examines best practices in contracting, negotiating and budgeting for industry-sponsored clinical trials. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Clinical Research Management MS major or certificate |
| HCR | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 101 | ASU & Herberger Institute Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university and the Herberger Institute for Design and the Arts. Explains and defines success with integrity, ASU resources and involvement, the importance of arts to society and the community, personality and learning style, and success in college and beyond. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Pre-requisites: Herberger Institute for Design and the Arts BA in the Arts or BA in Design Studies major; Credit is allowed for only HDA 101 or 194 (ASU Herberger Inst Experience) |
| HDA | 125 | Fashion Design I | Introduces designing a collection of marketable apparel for a targeted merchandise category. Includes instruction in using inspiration to synthesize garments in a collection, editing a collection for the most marketable ideas, sourcing, fabric selection, costing, and an introduction to pattern development and garment production. | N | LEL | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | |
| HDA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 210 | Creativity and Innovation in Design and the Arts | Designed to get students thinking in a focused manner about creative practice and process. Many young designers and artists arrive at higher education in their discipline having taught themselves or having received a piecemeal education in the directed application of ideas. Aids students in knowing why and how they are creative. Covers types of creativity, how inspiration happens, how to take a project from idea to reality, how to work creatively in teams and how to fuse creative ideas with an understanding of environment to help realize work in socially useful ways. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Credit is allowed for only HDA 210 or 294 (Creativity & Innovation for Design and the Arts) |
| HDA | 225 | Fashion Design II | Expands upon fashion design fundamentals learned earlier to encompass additional aspects of the fashion industry, which includes fashion as business, and as a sociological and cultural phenomenon. | N | LEL | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Prerequisite(s): HDA 125 with C or better |
| HDA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 310 | Socially Engaged Practice | Students gain a wide literacy in the community arts field through reading, discussion and technical practice. Examines theories and techniques of community-based project development. Pairs artists with communities to create art rooted in the needs, values, desires, triumphs and challenges of that community. Helps prepare the artist of the 21st century with skills to apply artistic practices in diverse contexts. | N | LEL | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 42 hours; Credit is allowed for only HDA 310 or 494 (Public Practice: Engagement & Community) |
| HDA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 397 | Capstone Development | Prepares students for a successful capstone project. Students develop a formal proposal and identify a mentor for the project. | N | LEL | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): The Arts BA major; minimum 56 hours |
| HDA | 410 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists--creative practitioners of all sorts--are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: HDA 310; Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |

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| HDA | 420 | Design and the Arts Business Administration | Design and the arts business seminar course that covers core business principles for design or arts businesses such as human resources, legal issues, accounting and finance. Asks with each of these areas how these disciplines uniquely work within design or arts settings. Investigates global business topics and discusses why ethics is integral to every design or arts business enterprise. Provides a broad understanding of design or arts business activities and practices, allowing more effective participation in business discussions in the future. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HDA 420 or 494 (Design & the Arts Bus Admin) |
| HDA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | |
| HDA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-7 | | |
| HDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-3 | | |
| HDA | 510 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research, and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists—creative practitioners of all sorts—are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |
| HDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 101 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| HEB | 102 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 101 with C or better |
| HEB | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HEB | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| HEB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HEB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 201 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 102 with C or better |
| HEB | 202 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 201 with C or better |
| HEB | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| HEB | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| HEB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 313 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 with C or better |
| HEB | 314 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in Modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 |
| HEB | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| HEB | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only HEB 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| HEB | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 348, 394 (Israeli Culture and Society), JST 348, REL 311, or SLC 348 |
| HEB | 375 | Contemporary Culture of Israel | Intense study of aspects of historical, social, political, and cultural modern life in Israel. Beginning of Zionism to present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| HEB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| HEB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| HED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| HED | 510 | Introduction to Higher Education | Overview of American higher education, including philosophical, political, and social aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 527 | Seminar: Student Affairs Administration | Organizational models, administrative competencies and skills, and emerging challenges of student affairs administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 573 | Applied Inquiry in Higher Education | Provides an overview of research, evaluation and assessment practices in higher education and strategies for utilizing these practices as professionals in higher education. Focuses on learning about and demystifying the process of scientific inquiry, with the intent of translating that knowledge to regular practice in a higher education professional career. It is not a highly technical methods course--no advanced knowledge of statistics or qualitative techniques is assumed--but instead gives practitioners a foundation in educational research design as well as the tools to be literate, thoughtful, critical and frequent consumers of research. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MED Higher and PostSecondary Education major. Credit is allowed for only HED 573 or HED 591 (Applied Inquiry) |
| HED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 620 | Diversity in Higher Education | Overview of the demographic profile of college students, faculty, and staff. Addresses issues of access, retention, and development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 634 | The American Community College | Philosophy, history, curriculum, faculty, students, organization, financing, research, policy and current issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 644 | Higher Education Finance and Budgeting | Financial planning and budgeting in higher education institutions. Issues related to financing public and private colleges and universities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 649 | Law of Higher Education | Analyzes legal issues related to higher education; examines key court decisions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 679 | The American College Student | Overview of American college student from demographic, background characteristics, and values/attitudes/perspectives. Includes access, persistence, and degree completion. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 688 | Organizational Theory | Major views of organizations and their influence on role definition and participant behaviors in educational organization. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 689 | Leadership in Higher Education | Theory and practice of leadership and administration in higher education institutions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 701 | Higher Education Doctoral Proseminar | Students read and discuss recent writings on the sociology of higher education and explore research interests as well as identities as educational researchers. Visits to several types of higher education institutions in the state of Arizona to meet various program faculty who introduce their interests as researchers and practitioners. Learn better understanding of the challenges and promise of higher education as an academic field and of themselves as researchers and practitioners. Time also spent discussing the dissertation and the writing process. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| HHE | 510 | Design and Health | Introduces health design core concepts while focusing on evidence-based design research to demonstrate how healthcare environments impact well being. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 540 | Current Issues in Health Design | Explores and systematically investigates current issues in health that are driving the current and future directions of the healthcare industry, including the design of healthcare and healing environments. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate OR Senior with minimum 108 hours |

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| HHE | 566 | The Healing Experience Research Lab | Connects spatial relationships and healthcare user needs through design, clinical delivery, and architecture. Applying research outcomes to the built environment. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Science in Design or Master of Healthcare Innovation student; HHE 510 and HHE 540 with B or better OR Master of Architecture, Bldg Des(Energy Perform/Bldgs) MS, Master of Landscape Architecture, or Master of Urban Design |
| HHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 591 | Seminar | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| HIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HON | 171 | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Prerequisite(s): Barrett Honors student; maximum 75 hours |
| HON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors students; Maximum 60 earned hours |
| HON | 272 | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Prerequisite(s): Barrett Honors student |
| HON | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 310 | Justice and Law | Philosophical study of theories of justice in relation to law and morality. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |
| HON | 366 | International France | Offered in France, course utilizes the "city as text" to analyze the construction of national identity. | N | PRA | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 370 | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | 378 | Culture and Society in England, Ireland, and Scotland | Chronologically explores texts, events, and sites for historical and cultural impact on development of England, Ireland, Scotland, and their countries' relationships with each other. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 379 | Romantics, Victorians, and Moderns | Examines the development and impact of various literatures, arts, and ideas in England, Ireland, and Scotland from the Romantic through the Modern period. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & G | Prerequisite(s): Barrett Honors student |
| HON | 380 | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | HU | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas); Credit is allowed for only HON 380 or 394: Aesthetics and Society |
| HON | 381 | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas); Credit is allowed for only HON 381 or 394: Science and the Self |
| HON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student, Minimum 30 hours |
| HON | 410 | Philosophy, Politics, and Law | Topics in political and legal philosophy, including political authority, obligation and disobedience, the nature of crime and punishment. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HON | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR non-Business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| HON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors student; Minimum 45 hours |
| HON | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | |
| HON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HPS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 311 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HPS | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 119 or higher; Minimum 30 hours; Credit is allowed for only HPS or PHI 313 |
| HPS | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314 |
| HPS | 322 | History of Science | Development and application of scientific thinking from ancient times through the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 323 | History of Science | Development and application of scientific thinking from the 18th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 325 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HPS | 330 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| HPS | 331 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| HPS | 332 | The Darwinian Revolution | Origin, nature, and subsequent history of the ideas of Charles Darwin. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 336 | Exploration and Science | 500-year survey of exploration as a historical process and cultural activity of Western civilization, with emphasis on its links with modern science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SB & H | |
| HPS | 340 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HPS | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |
| HPS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 410 | Professional Values in Science | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Credit is allowed for only BIO 416 or HPS 410 |
| HPS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| HPS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HPS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| HPS | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, HPS, MBB, MIC, or PLB 496 |
| HPS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| HPS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| HPS | 511 | History of Science | Teaches crucial skills needed for graduate-level research in history of science, including (1) critical analysis of primary sources from different periods in the history of science and (2) critical analysis and familiarity with important trends in the secondary literature ("historiography of science"). | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 512 | Philosophy of Science | Serves as a graduate-level introduction to five central themes in philosophy of science, and as a means to begin to investigate new topics. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 516 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only BIO 518, HPS or HST 516 |
| HPS | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HPS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HPS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: graduate student (degree seeking or nondegree seeking). Credit is allowed for only HPS 620 or BIO 620 |
| HPS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HRC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 200 | Introduction to Social and Cultural Analysis | Introduces social and cultural analysis. Focuses on key terms and analytical categories for interdisciplinary work in social and cultural analysis and related fields such as American studies, ethnic studies, women and gender studies and Latin American studies. Examines a range of forms of oppression and privilege from a social justice perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HRC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 310 | Social and Cultural Studies: Method and Theory | Covers how scholars in social and cultural studies think, argue, research and write. Traces the changing definition of fields such as American studies, ethnic studies, and women and gender studies. Studies these fields in relationship to 20th-century social movements and related theoretical categories including Marxism, cultural studies and class; feminism, gender and sexuality; and post-Colonialism, race and ethnicity. Covers basic archival and ethnographic research techniques underlying interdisciplinary research methods in these fields. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: Minimum 36 hours |
| HRC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 480 | Capstone: Practices and Approaches | Examines theoretical, methodological and epistemological issues in American studies, women and gender studies, and ethnic studies. Studies a wide variety of interdisciplinary theories, methodologies and epistemologies from an intersectional analysis of race, class, gender and sexuality in national and transnational contexts. Places special emphasis on historical definitions and debates on the relationship among theory, activism and praxis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): AMS 201 or ETH 100 or HRC 200 or WST 100 |
| HRC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HRC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| HRC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| HRC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| HSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 210 | Cultural Aspects of Health | Examines how culture influences health, healthcare practices, barriers to health care, interactions with healthcare professionals, and health disparities in the U.S. Addresses the need for cultural competence among health practitioners. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | C | |
| HSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 300 | Complementary Healthcare | Evaluates the major components of complementary and alternative healthcare models and evidenced-based recommendations related to complementary healthcare. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 210, HCR 230, or BIO 202 |
| HSC | 304 | Health Communication | Focuses on communicating topics related to health through an examination of theoretical frameworks, communication techniques, and different technologies including ehealth and mhealth. Addresses communication through channels that promote the health of individuals and communities. Topics may include clinician to client communication, peer to peer communication, health literacy, health in the media, and effective public health communication. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only HSC 304 or HSC 394 (Health Communication) |
| HSC | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Co-requisite: One of the following: ECD/EED/SED/SPE 396/397/478/496, PPE 474/484 or TEL 484; Credit is allowed for only HSC or PPE 310 |
| HSC | 320 | Applied Medical/Healthcare Ethics | Integrates the theory and practice of ethics within health-related disciplines and the application of bioethics by health science professionals, including health disparities. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | HU | Prerequisite(s): PHI 101 (or PHI 103, 306 or 314) OR Medical Studies major with PSY 101 (or SOC 101) |
| HSC | 330 | Healthcare Systems in the U.S. | Presents and integrates the organization, financing, and delivery of health services in the United States from the professional, organizational, community, and systems perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 320 |
| HSC | 332 | Health Care Legislation | Provides an overview of the federal/state health policy legislative process, how it is implemented in institutions, and its effect on health science professionals and delivery of services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 210 or HSC 320; HCR 220 or HSC 330; Credit is allowed for only HSC 332 or HSC 494 (Health Care Legislation) |
| HSC | 340 | Changing Health Behaviors | Comprehensive review of the theoretical bases of health behavior change. Students gain the knowledge to identify behaviors associated with optimal health and wellness and to develop theory-based intervention strategies and techniques to effectively influence behavior change. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 230 or HSC 210; PSY 101 (or PGS 101); Credit is allowed for only HSC 340 or HSC 394 (Changing Health Behaviors) |
| HSC | 355 | Eating for Lifelong Health | Examines dietary choices throughout the life span and how they impact personal health and wellness. Prepares health and wellness team members to evaluate consumer and professional materials on dietary choices. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): NTR 100 or NTR 241 |
| HSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 400 | Practicum in Health Sciences | Supervised experience in area of student specialization. Students are placed with an agency, organization, business, and/or facility that meets their specific academic goals. | N | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Health Sciences Senior student |
| HSC | 401 | Professions and Practices in the Health Sciences | Provides the opportunity to explore career options within the health sciences, compare credentialing/licensure requirements across the U.S., describe professional organizations and societies related to the health sciences, evaluate employment trends in the health sciences, and interview professionals currently active in a health sciences-related field. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 320 |
| HSC | 410 | Supporting the Health of Older Adults | Focuses on community and national policies and programs that affect the health of older adults, programs to improve access to healthcare as well as to improve overall health, issues related to family and professional caregiving, and future challenges related to caring for older adults. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; Credit is allowed for only HSC 410 or HSC 394, Supt Health Older Adult |
| HSC | 412 | Health Issues in Later Life | Focuses on health issues that primarily affect adults ages 50 years and over as related to nutrition, physical activity, environmental toxins. Focuses on exploring those factors known to promote healthy aging. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; Credit is allowed for only HSC 394(Health Issues in Later Life) or 412 |

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| HSC | 420 | Evaluation of Health Sciences Research | Investigates methods of inquiry in health sciences and techniques for critiquing and interpreting research within the context of evidence-based practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): POS 401 (or PSY 230 or 231 or SOC 390 or STP 226 or 231 or 420) OR Medical Studies major with HCD 300 (or HSC 320) |
| HSC | 432 | Legal Issues in Healthcare | Legal doctrines provide protection of consumers, healthcare providers, and healthcare institutions with regard to healthcare delivery including access and cost. Provides an overview of the legal obligation and rights of private and public stakeholders in the delivery and receipt of healthcare services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 330 or 332 |
| HSC | 435 | Environmental Health Issues in the U.S. | Environmental health designed to address public health issues. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HSC 210. Credit is allowed for only HSC 394 (Envrnmtal Hlth lss in U.S.) or HSC 435 |
| HSC | 440 | Health Coaching Concepts and Skills | Health coaching techniques and skills for health promotion professionals with emphasis on the practical application of brief intervention and motivational interviewing skills to promote healthy lifestyle changes. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; PGS 101; Credit is allowed for only HSC 440, 498 (Health Coaching Concepts Skill) or NTR 530 |
| HSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): minimum 2.00 GPA; senior standing |
| HSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| HSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | |
| HSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| HSD | 501 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 501 or POS 571 |
| HSD | 502 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): HSD 501 or POS 571 with B or better; Credit is allowed for only HSD 502 or POS 572 |
| HSD | 503 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only PAF 550 or HSD 503 or POS 573 |
| HSD | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HSD | 505 | Science and Technology Policy Workshop | Provides the capstone experience for the Professional Science Master's in Science and Technology Policy. Builds on theoretical and analytical work carried out in the program's required courses, providing an integrative experience that requires students to synthesize knowledge gained in prior coursework and apply it to real-world policy problems and settings. By blending exposure to national science and technology policy officials and nationally recognized academic experts, the workshop both advances student learning beyond that possible in the classroom while encouraging students to expand their abilities to connect theoretical and practical insights. At the same time, the workshop provides a natural transition from the student's formal classroom learning to their required applied policy internships, which commences upon the end of the workshop. | N | SEM | N | YGB | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 515 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| HSD | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| HSD | 540 | Responsible Innovation and Research | Movements throughout Europe and increasingly the U.S. are beginning to consolidate the recognition of the profound effects that research outcomes have upon the world under the idea of responsible innovation and research. The responsible innovation and research pushes beyond the responsibilities of the individual researchers and addresses larger issues such as research agenda setting, management of large-scale research and innovation enterprises, funding priorities and innovation as a national policy priority. Explores the idea of innovation as a national policy; the practical and theoretical underpinnings of responsibility in the research world; the history, current state and future trajectories of responsible research and innovation. Focuses on the current literature in the field. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | |
| HSD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 601 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 601 or POS 671 |

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| HSD | 602 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. Continuation of HSD 601. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 602 or POS 672 |
| HSD | 610 | Colloquium | Regular meeting for the entire HSDST community. Includes outside speakers, student and faculty member presentations, and community discussions. | N | SEM | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | GRD | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 220 | Health Care Organizations | Overview of United States healthcare delivery systems; financing, health policy, basic principles of budgeting, cost-benefit analysis, and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | H | |
| HSM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| HSM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 502 | Health Care Organization | Concepts, structures, functions, and values that characterize contemporary healthcare systems in the United States. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 505 | Managerial Epidemiology I | Basic constructs and measures of epidemiology. Epidemiologic study designs. Potential impact of chance, bias, confounding, on an epidemiologic study. Causal criteria; levels of evidence in epidemiological studies, implications and limitations of statistical association. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 561 or ECN 501 with C or better. |
| HSM | 512 | Healthcare Economics | Economics of production and distribution of healthcare services, with special emphasis on the impact of regulation, competition, and economic incentives. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 522 | Health Sector Information Management | Information technology and knowledge management applications in the health sector, including care delivery and financing institutions and in the pharmaceutical and biotechnology industries. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 542 | Healthcare Law | Legal aspects of healthcare delivery for hospital and health services administration. Legal responsibilities of the hospital administrator and staff. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 561 | Biostatistics | Aspects of descriptive statistics and statistical inference most relevant to health issues, including data, rates, and confidence intervals. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 564 | Health Care Finance | Overview of the acquisition, allocation, and management of financial resources by healthcare providers. Focuses on economic, financial, and accounting principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 565 | Introduction to Health Policy | Current policy issues in health through concepts of access, cost, and quality; issues relating to disease trends and policy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 589 | Healthcare Strategic Management | Capstone assessment of current policies, problems, and controversies across the broad spectrum of health services administration. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |

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| HSM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| HST | 107 | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 203 | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 204 | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 210 | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | 306 | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 309 | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 310 | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 315 | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 316 | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 318 | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |
| HST | 325 | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 327 | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in African history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 342 | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| HST | 343 | American Southwest | Development of the region from 1848 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 344 | Arizona | Emergence of the state from early times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 345 | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |
| HST | 354 | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 356 | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 361 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | 364 | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 368 | Culture and Imagination in European History | Topics in European cultural and intellectual history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 372 | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 405 | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 407 | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 409 | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 416 | Western Rivers | Examines the relation between rivers, culture, and environment in the American West. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & H | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 428 | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 429 | Modern Germany | Germany since 1871. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 444 | Latin American Independence | History of independence movements throughout the Western hemisphere from the late 18th century until the mid-19th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 448 | Mexican/U.S. Border | Analyzes the evolution of the Mexican/U.S. border region from the mid-19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 449 | Mexican Immigration to the U.S. | Assesses the evolution of immigration and emigration public policy since the mid-19th century. Seeks to contextualize the relationship between immigration and other elemental nation-state issues as the economy, education, identity, and civil rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 450 | Postmodern Mexico | Challenges historical myths about the evolution of the nation state and calls into question that globalization and transnationalism are only recent phenomena of the postmodern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 456 | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

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| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 106 | Asian Civilizations | Civilizations of China, Japan, and India from antiquity to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 107 | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 108 | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST or REL 111 |
| HST | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HST, POS 112 or HST 194 (Foundations of Democracy) |
| HST | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Elmtly Ed |
| HST | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Credit is allowed for only GCU or HST 114 |
| HST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 200 | Historical Themes | General introduction to selected themes in history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 201 | Historical Themes in Asia | General introduction to selected themes in Asian history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 203 | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 204 | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 210 | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | |

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| HST | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |
| HST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| HST | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| HST | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| HST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301 |
| HST | 302 | Studies in History | Specialized topics in history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 303 | Studies in Asian History | Specialized topics in Asian history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 304 | Studies in European History | Specialized topics in European history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 304 or JST 304 |
| HST | 305 | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 306 | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 307 | Studies in African History | Specialized topics in African history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 309 | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 310 | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 315 | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 316 | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| HST | 318 | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |
| HST | 320 | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 321 | Constitutional History/US to 1865 | Origin and development of the American constitutional system from colonial period through the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 322 | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 323 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and African Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| HST | 325 | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 326 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | 327 | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 329 | Women in 20th-Century U.S. West | Nuanced exploration of how women of various cultures have contended for and shaped the U.S. West, including the West of imagination. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| HST | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| HST | 333 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 335 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| HST | 337 | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 338 | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 340 | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 342 | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 343 | American Southwest | Development of the region from 1848 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 344 | Arizona | Emergence of the state from early times to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 345 | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |
| HST | 346 | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 347 | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 348 | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 349 | Early Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 5th through 10th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 350 | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 351 | Renaissance Europe | Culture of the Renaissance in Italy and Northern Europe from the 14th to the early 16th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

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| HST | 352 | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 353 | Old Regime in Europe | Society and culture of Europe during the 17th and 18th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 354 | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 356 | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 357 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | 358 | Jewish History from the Bible to 1492 | Continuity and change in political, legal, economic, and sociocultural history of the Jews from biblical through medieval times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 359 | Jewish History from 1492 to 1948 | Jewish history from early modern through modern times, highlighting emancipation, enlightenment, and Jewish responses to modernity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 361 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | 362 | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 363 | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 364 | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 365 | World Wars I and II: Europe's Eastern Front | In-depth study of the history of the Eastern Front in Europe in the two world wars. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 365 or 394 (WWI and WWII Eastern Front) |
| HST | 366 | England to 1689 | In-depth examination of the political, economic, and social development of the English people to the late 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 367 | Modern Britain | In-depth examination of the political, economic, and social development in Britain from 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 368 | Culture and Imagination in European History | Topics in European cultural and intellectual history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 369 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| HST | 370 | Eastern Europe in Transition | Democratization, privatization, and identity transformations since the fall of communism in contemporary Eastern Europe and the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 371 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 371 or REL 377 |
| HST | 372 | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | 373 | Roman History I: Foundations and Republic | Traces the growth of Roman power from Rome's humble beginnings in the eighth century B.C. to its domination of the Mediterranean and the transformation of the Roman Republic into the Roman Empire after the Battle of Actium (31 B.C.). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 374 | Roman History II: The Roman Empire | The Roman Empire from the reign of the first emperor, Augustus (27 B.C.-A.D. 14), to that of Justinian (A.D. 527-565), focusing on the lives of the Roman emperors, the society and culture of the empire, and the profound changes that eventually contributed to the empire's collapse. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours |
| HST | 375 | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 376 | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 378 | Latin American Women: The National Period | In-depth study of the history of women, gender relations, and state policies in a broad continental setting, from independence to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 383 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |

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| HST | 384 | China | Political, economic, social, and cultural history of the Chinese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 385 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HST | 386 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HST 386 or SLC 336 |
| HST | 387 | Japan | Political, economic, social, and cultural history of the Japanese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 388 | Japan | Political, economic, social, and cultural history of the Japanese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 389 | Japan Society and Values/Premod | Effects of economic and social transitions on personal and social values as reflected in the dramatizations of contemporary events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | 391 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |
| HST | 392 | Modern India | In-depth study of modern India and its neighboring countries from the 18th century to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 392 or HST 303 (Modern South Asia) or HST 394 (Modern South Asia) |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 397 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| HST | 405 | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 407 | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 409 | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 410 | Modern U.S., 1918 to 1945 | 1920s boom and the crash, the Depression and the New Deal response. The Second World War at home and abroad. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 411 | Postwar U.S., 1945-1973 | Cold War, prosperity, reform, and immense social and political change in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 412 | Contemporary U.S., 1973-Present | End of the Cold War, political crises, and cultural transformations in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| HST | 415 | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 423 | The Tudor Monarchy | Political, cultural, and social foundations of 16th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 424 | The Stuart Monarchy | Political, social, economic, and cultural developments in 17th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 426 | The British Empire | British imperialism and colonialism in Africa, the Americas, Asia, and the South Pacific. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 427 | French Revolution/Napoleonic Era | Conditions in Pre-Revolutionary and Revolutionary France; organization of France under Napoleon and impact of French changes upon Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|----------------------------------------------------|-------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 428 | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 429 | Modern Germany | Germany since 1871. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 431 | Eastern Europe and the Balkans, Pre-1914 | Empire and nation in Eastern Europe and the Balkans before World War I, emphasizing Hapsburg and Ottoman lands. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 432 | Eastern Europe the Balkans, 20th Century | Politics and culture in Eastern Europe and the Balkans from World War I to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 435 | The Russian Empire | Development of Russian imperial institutions and civil society from the 17th to the early 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 436 | The Soviet Experiment | In-depth study of Communist revolutionaries' rule of Russia, focusing on utopian culture, Stalinist terror, heroism in war, and the breakup of the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 438 | Modern Spain | Cultural, economic, political, and social development of modern Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 443 | The United States and Latin America | Latin American struggle for diplomatic recognition, attempts at political union, participation in international organizations since 1810, and relations between the United States and Latin America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 445 | 20th-Century Cuba | History of Cuba from colonial era to formation of the early republic; political, economic, social development in late 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 447 | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| HST | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| HST | 453 | The People's Republic of China | Analyzes major political, social, economic, and intellectual trends in China since the founding of the People's Republic in 1949. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 456 | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 459 | Gandhi and the Politics of Nonviolence | In-depth study of Gandhi and the Gandhian political philosophy and practice of nonviolence. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 55 hours. Credit is allowed for only HST 459 or HST 498, Gandhi: Politics of Non-Violence |
| HST | 465 | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; ENG 102, 105, 108 with a C or better; Minimum 55 hours; Credit is allowed for only HST 480 or HST 530 |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | 496 | South, Southeast, and East Asia in the Global Matrix | In this capstone seminar, majors in Asia Studies take up broad comparative themes, integrating knowledge from the major's three tracks (East, South, and Southeast Asia) and executing a research project culminating in a major paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s) with C or better: ASB 240 (or GCU 240 or HST 111 or 240 or 245 or POS 240 or REL 240 or 245 or SGS 240 or 245); ENG 102 (or ENG 105, or 108); minimum 55 hours |
| HST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |

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| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| HST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 502 | Public History Methodology | Introduces historical research methodologies, techniques, and strategies used by public historians. Readings, short papers, and guest speakers. Required for students in the public history concentration. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 515 | Studies in Historiography | Methods and theories of writers of history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HST | 525 | Historical Resource Management | Identification, documentation, and interpretation of historic period buildings, sites, and districts. Emphasizes interdisciplinary efforts among historians, architects, and anthropologists. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 527 | Historical Administration | Preparation of historians in administration of archives and historical sites, museums, societies, and offices in government agencies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 532 | Community History | Techniques and methods of community history emphasizing local resources. Required for community history option. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 573 or HST 573 |
| HST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |

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| HST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G & H | |
| HST | 108 | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |

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| HST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Pre-requisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | 305 | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 320 | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 322 | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 326 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 337 | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 338 | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 340 | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 346 | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 347 | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 348 | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 350 | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 352 | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 357 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | 360 | The Crusades: Religion & Conflict in the Middle Ages | Examines the origins, the development, and the outcomes of the movement that we call "crusades" by connecting the military aspect of the crusades to broader developments. Focuses primarily, but not exclusively, on the period 1095-1453. Geographically covers chiefly the Mediterranean, and, to a lesser extent, northeastern Europe. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours; Credit is allowed for only HST 360 or 394 (Crusades in the Middle Ages) |
| HST | 362 | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 363 | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 375 | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 376 | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 400 | Topics in American Historical Periods | Focuses on specific periods in American history. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 404 | Conquest | How did Hernan Cortés and Francisco Pizarro defeat the Aztec and Inca Empires? Despite numeric inferiority, limited provisions, and little knowledge about the Americas, Cortés and Pizarro defeated advanced civilizations that had experienced warriors and millions of inhabitants. Possible explanations include the conquistador's valor, advanced weaponry, superior military strategy, Indian allies, and biological attacks. In their encounters with native peoples of the Americas, Europeans were not always conquerors. Alvar Núñez Cabeza de Vaca and Lope de Aguirre failed both in their attempt to conquer a large Indian civilization and in their effort to find mineral wealth. A few Europeans such as Bartolomé de Las Casas spoke out against the abuses committed against the Indians during the conquest. Explores these issues from the perspective of both Europeans and native peoples and looks at the long-term impact for Latin America and its peoples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L & G | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 404 or 494 (Conquest & Encounters) |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 415 | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 418 | The Hispanic Southwest | Development of the Southwest in the Spanish and Mexican periods to 1848. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| HST | 419 | 20th Century Chicano/a History | Historical development of the Chicano community in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 430 | The Ottoman Empire in the Classical Period | Focuses on the largest and most powerful Islamic polity from the late Middle Ages until the early twentieth century: its formation, institutions, social and cultural life, and its multifaceted impact on Europe and the Near East. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 430 or HST 495 (The Ottoman Empire in the Classical Period) or HST 498 (The Ottoman Empire in the Classical Period) |
| HST | 447 | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | 454 | History of Genocide | Examines the individuals and institutions responsible for the most infamous episodes of state-sanctioned violence in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G & H | Prerequisite(s): minimum 45 hours. Credit is allowed for only FOR 454 or HST 45 |
| HST | 464 | Women in Europe to 1750 | European women's diverse religious, ethnic, national and economic roles in society, culture, and politics in the pre-modern period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | Prerequisite(s): ENG 102, 105 or 108 with C or better; HIS 101 or 300 with C or better |
| HST | 465 | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

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| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: History or Secondary Education (History) student; ENG 102, 105 or 108 with C or better; Minimum 55 hours; Credit is allowed for only HST 300 or 495 |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUD | 301 | Housing and Community Design and Development | Single- and multifamily housing, residential neighborhoods, and planned communities. Affordability in owner-occupied and rental housing. First-time, move-up, and adult markets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 302 | Housing Production Process | Development feasibility analysis, finance, contracts, land acquisition, community and permit presentation and negotiation, scheduling, cost control, marketing, and sales. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 361 | Housing and Urban Development Studio I: Residential Design and Development | Affordable residential design, development, and production process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Developmnt student; Passed Milestone; Co-requisites: HUD 301; HUD 363 |
| HUD | 362 | Housing and Urban Development Studio II: Community Design and Development | Neighborhood and new community design and development process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Developmnt student; HUD 361 with C or better; Co-requisite: HUD 302; HUD 364; HUD 403 |
| HUD | 363 | Housing and Urban Development Seminar I: Residential Design and Development | Affordable residential design, development, and production process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Developmnt student; Co-requisites: HUD 301; HUD 361 |
| HUD | 364 | Housing and Urban Development Seminar II: Community Design and Development | Neighborhood and new community design and development process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Developmnt student; Co-requisites: HUD 302; HUD 362; HUD 403 |
| HUD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 401 | Assisted Housing | Publicly subsidized and nonprofit housing. Policy, implementation, and administration. FHA, Section 8, FmHA, projects and scatter site, and tax considerations. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 402 | Community Revitalization: Problems and Strategies | Public policy and strategies for neighborhood revitalization and community renewal. Preservation and adaptive reuse, gentrification, neighborhood safety, and related socioeconomic concerns. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 403 | Advanced Topics in Housing and Urban Development | Varying topics, such as manufactured housing, homelessness, mortgage and finance in housing, housing abroad, marketing housing, and sustainable community development. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 461 | Housing and Urban Development Studio III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction, cost management, and marketing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Developmnt student; HUD 362 with C or better; Co-requisites: HUD 401; HUD 463 |
| HUD | 462 | Housing and Urban Development Studio IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Developmnt student; HUD 461 with C or better; Co-requisites: HUD 402; HUD 464 |

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| HUD | 463 | Housing/Urban Dev Seminar III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction and cost management, and marketing. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Develpmnt student; HUD 302 and HUD 364 with C or better; Co-requisites: HUD 401; HUD 461 |
| HUD | 464 | Housing and Urban Development Seminar IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Develpmnt student; Co-requisites: HUD 402; HUD 462 |
| HUD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Housing & Urban Develpmnt BSD student |
| HUD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| HUD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HUD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| HUM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 530 | Pop Culture America | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Division of Humanities | 3 | | |
| IAP | 101 | Art, Artist, and Culture | Provides an approach to art, creativity, and culture in global, historical, and contemporary contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 102 | Foundations I: Performance Techniques and Composition | Focuses on practice-based studies of contemporary presentational strategies and techniques. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 103 | Foundations I: Interdisciplinary Digital Media | Digital media studies and application of contemporary artists, processes, and presentation practices in interdisciplinary arts. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 104 | Foundations I: Fundamentals of Sound Art | Investigates late 20th- and 21st-century sound art and our relationship with it. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 105 | Foundations I: Fundamentals of Visual Art | Focuses on contemporary aesthetic concepts and language for interdisciplinary visual arts application. Introduces core concepts of visual design: the elements and principles of design and the creative process, the basics of drawing, color theory, typography and 2D design. Engages student in the fundamental aspects of design to build an adequate foundation and prepares for the next level of the study of interdisciplinary arts practice. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

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| IAP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 201 | Introduction to Interdisciplinary Arts | Considers interdisciplinarity in practical terms in all art forms. Also considers antecedents and cross-cultural issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 202 | Perspectives on Interdisciplinary Arts and Performance | Social, cultural, and historical examination of interdisciplinary art and performance and a survey of current interdisciplinary work and approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 301 | Energetic Systems of Art: Collaboration in the Arts | Identifies and explores the energetic systems at work in the creation, performance, and perception of art. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 302 | Cross-Cultural Perspectives on the Arts | Social and cultural perspectives of art and performance through a survey of historical and contemporary attitudes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 304 | Traditions of the Avant-Garde and Experimental Art | Surveys 20th-century art movements and isms, including futurism, dada, surrealism, constructivism, realism, the Bauhaus, abstract expressionism, minimalism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 305 | 20th and 21st Century Art, Performance, and Media | Surveys artists, movements, and trends in the arts with an emphasis on interdisciplinary performance, media, and technology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 307 | Art and War | Global interdisciplinary survey of the range of work created by artists in response to war, through time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 310 | Women in Art | Cultural, historical, and social issues relating to the seeming scarcity of women artists and changing social contexts for women artists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre/Co-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAP or IAS 310 |
| IAP | 321 | Music Composition I | Study and implementation of specific compositional theories and procedures. May be repeated for credit when topics vary. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 322 | Multitrack Digital Recording | Introduces students to theory and practice of Musical Instrument Digital Interface (MIDI) technology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 324 | The Voice and Performance | Involves all aspects of the human voice, including research, creation, and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 325 | Sound Performance: Exploring Alternative Performance Groups | Utilizes innovative sound ensembles to explore all aspects of sound and its place in various art forms. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Pre/Co-requisite: IAP 201 or 202 |
| IAP | 331 | Performance, Acting, and the Individual | Explores the concepts of the self, the subject, and the author as each pertains to the solo artist. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| IAP | 332 | Technical Production for Interdisciplinary Arts | Develops basic technical knowledge and application of fundamental stagecraft techniques used in the creation and presentation of performance works. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 333 | Directing for Performance | Explores various strategies for performance. Emphasizes nontraditional staging and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 334 | Conceptual Development in the Arts | Conceptual development processes in the arts from initial idea to formal project proposals, grants, and production plans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 or IAP 202 |
| IAP | 352 | Seeing and Drawing | Develops drawing and seeing skills that are important not only to visual arts but also to music, dance, and theatre. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 354 | Visual Representation | Explores materials, processes, and aesthetic concepts of art making through various media with readings on cultural perspectives and contemporary theory. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Co-requisite: IAP 201 or 202 |
| IAP | 355 | Illusion and Vision | Inquiry into 2-D surfaces for visual representation and personal expression; includes readings on color theory, visual perception, and historical/cultural patterns. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 361 | Digital Editing and Media Literacy | Investigates the approaches used in digital editing with a focus on interactivity, graphics, audio, and desktop video. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or BA Digital Culture student |
| IAP | 362 | Games & Narratology | Focuses on design techniques for the writing of nonlinear and interactive stories in the video game development process. Compares and contrasts game writing with other creative writing such as short story, song writing, oral history, poetry, fiction and film. Examines, deconstructs and questions the game design approach commonly referred to as narratology. Inspects key texts in media and cultural studies for attitudes, ideas and thoughts on games and narrative in games. Uses materials, processes, and aesthetic concepts of level design and visual skills needed to create a video game using a game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 101 and 102 with C or better; IAP 105 with C or better |
| IAP | 363 | Sound, Image, and Media | Interdisciplinary arts projects for experimental approaches to relating sound and visual image, accompanied by survey of historical and contemporary material. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

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| IAP | 364 | Documentaries | Media arts projects exploring new and experimental forms of visualization based upon an interdisciplinary survey of historical and contemporary examples. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 365 | Digital Interactivity | Combines graphics, video, and animation with digital authoring tools for creation of interactive multimedia Web sites. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 368 | Digital Graphic Technologies | Employs technology used in contemporary graphic designs to design concepts and techniques for modeling and representation applications. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 371 | Verbal Art | Examines varieties of verbal art in everyday life, literature, oral and literate cultures. Considers diverse cultural forms and values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 375 | Contemporary Performance: Theories and Practice | Performance course focusing on elements of contemporary and digital performance in relationship to stage, new technologies, video, installations, and public art. Through interdisciplinary strategies, students gain tools to deepen their knowledge and range of performance. Requires students to engage in research, conceptualization, and the creation of new original work, combining classroom workshops, various readings, fieldwork, and production to emphasize interdisciplinarity, collaboration, and personal vision. Once theories and concepts are explored, students work in a conceptually based and physically rigorous environment toward producing new work, culminating in a final performance project. | N | STO | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 or 202 |
| IAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| IAP | 421 | Composition: Process, Technique, and Style II | Advanced study of specific compositional theories and procedures; in-depth analysis of individual work. | N | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 431 | Perspectives on Performance and Acting | Focuses on the interaction of the performer with media, alternative stagings, and collaboration with other performers. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 433 | Directing Workshop | Applies experimental directorial techniques to presentations and deconstruction of classical works including European and cross-cultural traditions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only IAP 433 or MAS 598 (Directing Workshop) |
| IAP | 434 | Production Laboratory | Develops original scripts into showcase productions. Students function as theatrical ensemble, participate in all phases of performance and production values. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 441 | Movement for Performance | Explores the relationship of movement as it relates to performance, both historically and cross-culturally. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 462 | Games and Play | Focuses on a study of play and game design. Discusses what play is and why humans need it as it pertains to game design. Considers and analyzes an examination of the dark side of play. Scrutinizes the concept of what critical play is and how games are working within social, political and cultural systems. Studies these concepts as the students design and execute a serious or artistic game demo using the materials, processes, aesthetic concepts of art making and scripting skills needed to create a video game using a 3D game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: IAP 105 with C or better |
| IAP | 464 | Media and Diversity | Interdisciplinary art projects exploring identity, perception, and technologies from a basis of class, race, ethnicity, gender, sexuality, and ecology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 465 | Media Technologies and the Arts | Practical explorations of media arts interrelated with cultures, society, and technology, addressed through readings, discussion, research, and student arts projects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 466 | Digital Interactivity, Advanced | Advanced multimedia authoring skills for creation of interactive works in DVD, CD ROM, and other media formats. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 467 | Acoustic Ecology | Investigations into the relationship between audio art and ecology; covers field recording, oral histories, digital editing, and designing audio Web site and databases. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 468 | Digital Graphic Applications | Targeting, planning, design, authoring, development, and presentation of professional digital media graphics for Internet and print. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 469 | Advanced Audio Production | Engages advanced media students in the technical, logistical, and aesthetic concerns specific to audio in all forms of digital media. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 471 | Language, Culture, and Performance | In-depth examination of language in myth, poetry, social and aesthetic performance genres. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 473 | Aesthetic Research | Investigates how artists, in all disciplines and from different historical periods, conduct or participate in research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |

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| IAP | 474 | Art and Film | Focuses on film as an art form in relation to the arts through aesthetics, cinematic theory, period study. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 480 | Senior Project | Capstone course. Students develop an exit project for the IAP degree under the guidance of an advisor. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-6 | | |
| IAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 210 | From Passion to Practice: Charting Your Path | Part self discovery, part professional boot camp, this highly interactive course allows students to explore their strengths and passions and utilize them most effectively in their careers. Drawing upon the expertise of successful leaders, organizations and guest speakers from diverse professions, students learn skills and methodology that prepare them for entry into a fulfilling profession. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only IAS 210 or IAS 294 (Passion to Practice: Charting Your Path) |
| IAS | 220 | Psychology, Multicultural Narratives, and Religion | Examines contemporary multicultural life narratives that explore diversity in America and the authors' constructions of psychological identity and religious values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 225 | Building a Better You | Equips students to manage their lives effectively and integrate beliefs, values and skills into fulfilling careers. Students develop a focused career path based upon their learning profile, interests and self-knowledge. Develops critical thinking and reading skills needed for effective decision making and communication. Uses the Let Me Learn Advanced Learning System® to enhance self-awareness and growth. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 300 | Adult Career Development | Analysis of sociological and economic factors of 21st-century work environments, integrated with a psychological understanding of adult development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or SB | Pre-requisites: ENG 101 or 105 with C of better or Applied Science student |
| IAS | 305 | Work and Identity | Explores the relationship between work and identity, as well as the search for meaning in work across generations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| IAS | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAS | 340 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-reqs for IAS 340. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |
| IAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 410, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |
| IAS | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |

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| IAS | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| IAS | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| IAS | 410 | Evolution of Ideas | Investigates ideas (paradigms) and revolutions (paradigm shifts). Examines several topics from perspectives of science, arts, humanities, social sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |
| IAS | 415 | Life in the Universe | Examines the search for life in extreme environments on Earth and in remote locations beyond Earth. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 416 | Black Holes and Beyond | Explores developments in understanding nature's most basic force-gravity-from Aristotelian concepts to modern theories of curved space-time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| IAS | 430 | Science and Religion | Examines evolving relationships between scientific thought and Western and Eastern religious thought. Explores cosmologies, worldviews, and epistemologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAS 430 or MAS 510 |
| IAS | 477 | World Literature | Introduces world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |
| IAS | 480 | Capstone: Practices and Approaches | Individualized projects developed by the student under the guidance of the capstone coordinator based upon the student's area of concentration. Provides an opportunity to apply the knowledge and skills developed in the course of their program to real-world situations. | N | RSC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): Interdisciplinary Arts and Sciences BA or Philosophy, Religion, and Society BA or Applied Science BAS major |
| IAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| IBC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 602 | Healthcare Statistics | Provides an overview of contemporary issues in health statistics and develops student proficiency in completing hands-on statistical analyses using Microsoft Excel. Develops proficiency in using Excel to manage data analyses as an ongoing tool to collect and analyze clinical and cost-effectiveness data in primary care and related healthcare settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 604 | Clinical Medicine/Pathophysiology | Overview of each of the main systems within the human body. Addresses the major diseases (symptoms, diagnosis, and medical treatments) within each system. Students learn appropriate medical terminology for symptoms, diseases, treatments, and medical tests so they can communicate effectively with medical practitioners (nurses and physicians). Content is equivalent to pathophysiology training in an RN program. Also addresses the role of behavioral care providers in medical settings; design and implementation of psychoeducational programs in primary care; stress management techniques for use in medical settings; chronic pain management; identification and treatment of somatization disorder; increasing compliance in noncompliant patients; alternative/complementary medicine; overview of nutrition; and the effects of exercise and nutrition on prevention and treatment of diseases. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 608 | Psychopharmacology for the Behavioral Care Provider | Provides overview of psychopharmacology to equip the behavioral care provider with the understanding of psychotropic medications necessary to make prescription recommendations to primary care physicians and to participate in medication management for patients being prescribed psychotropics. Basic principles of pharmacology in general, including pharmacokinetics, pharmacodynamics, medication development and the FDA approval process, interaction effects, drug company marketing strategies, appropriate and inappropriate medication usage, over-medication, and off-label medication use. Pharmacokinetics and pharmacodynamics in special populations (children, the elderly, and patients with co-morbid medical and psychological conditions). The Biodyne protocol for medication management, with emphasis on determining which psychological disorders are likely to be medication responsive. Major classifications of psychotropic medications: stimulants, antidepressants, anxiolytics, antipsychotics, mood stabilizers, narcotics. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 609 | Clinical Neuropathophysiology | Presents overview of each of the basic neuroanatomy, neurophysiology, and a focus on the manifestations of neurophysiological dysfunction across the life span for Doctor of Behavioral Health (DBH) program behavioral clinicians. Covers the basic human brain anatomy, neurophysiological processes, development, and maturation. Using case studies, presents and discusses evidence-based support for theories of psychiatric disorders and neuropsychopathology. Incorporates evidence-based research findings on the role of genetics, neurophysiological adaptation, epidemiological and societal influences in order to develop understanding of disruptions in normal neurophysiological functioning. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 610 | Behavioral and Psychological Assessment in Primary Care | Presents a comprehensive model of behavioral and psychological assessment for behavioral health clinicians in primary care and related medical settings. Provides behavioral health consultants with the necessary knowledge base and skills to develop an appropriate assessment and treatment plan for a variety of commonly seen complaints in primary care. Places attention on the assessment of both psychiatric and behavioral complaints across the lifespan. Students become familiar with both structured interview and empirically support quantitative measures consistently utilized to enhance our understanding of the presenting complaint. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 612 | Introduction to Behavioral Interventions | Provides a foundational understanding of behavioral health interventions for primary care settings for those students intending to work in administrative, management or allied health positions. Provides a theoretical basis for various psychological schools of thought, as well as an overview of the empirical evidence for those approaches. Reviews models of therapy including: psychodynamic, brief strategic, cognitive-behavioral and solution-focused. Also reviews two intervention strategies typically used in integrated settings: Acceptance and Commitment Therapy (ACT) and Motivational Interviewing (MI). Explores the ways that these approaches serve as the theoretical framework of the Biodyne model. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 612 or IBC 780 (Introduction to Behavior Intervention) |
| IBC | 613 | Cognitive/Affective Bases of Health | Provides an overview of cognitive and affective theories and their intersection with health and health behavior change among individuals and communities. Covers topics including (but not limited to): Health Belief Model, self-efficacy, attribution theory, social-cognitive theory, and the transtheoretical model of change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IBC | 615 | Innovative Technologies in Behavioral Health | Provides a quick overview and answers to basic questions related to both online therapy and telemental health. Gives a downloadable audio recording (MP3) and access to the accompanying video clips that augment a rich sampling of pages extracted from our other coursework. As a composite, this experience introduces our multi-modal learning environment and, more importantly, gives an idea of the issues involved with establishing an online or otherwise remote practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 616 or IBC 780 (Innovative Technologies in Behav. Health Intervention) |
| IBC | 620 | Psychosomatic Illness: Diagnosis & Treatment | Teaches how to successfully diagnose and treat physical illness caused by various forms of psychosocial stress (psychophysiological disorders, PPD). Because patients are often unaware of the nature or degree of stresses that are responsible for their illness, places emphasis on learning how to detect and use clues that patients provide to develop a more complete understanding of the struggles than they are able to perceive for themselves. Focuses on selecting, assessing and treating a patient known to the student who has medically unexplained physical symptoms. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 620 or IBC 780 (Psychosomatic Illness: Diagnosis and Treatment) |
| IBC | 624 | Integrated Behavioral Health Care for Children and Adolescents | Integrates developmental psychology with pediatric psychology in order to prepare behavioral clinicians to provide screening, assessment, and intervention for children and adolescents in primary care and other medical settings. Presents an overview of developmental stages with an emphasis on critical tasks, while contrasting normal versus abnormal development. Develops societal, familial, and cultural influences. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 634 | Strategies and Techniques for Behavior Change in Primary Care | Examines and discusses the theoretical and applied health-related research changing nutrition, smoking and physical activity behaviors in clinical practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 660 | Healthcare Legal, Ethical, and Professional Issues | Integrate three key areas of healthcare ethics, law, and professional issues for the Doctor of Behavioral Health (DBH) clinician in primary care: (1) the code of ethics for psychologists; (2) legal and ethical issues in medicine; and (3) technological issues and the behavioral health provider. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 670 | Integrated Behavioral Health Interventions for Substance Use Disorders | Focuses on the theoretical foundations, research and strategies for identifying, intervening and/or referring patients in primary care and other healthcare settings that present with substance use disorders or problem use. Provides detailed information about the clinical model of SBIRT (Screening, Brief Intervention, and Referral to Treatment), along with strategies for implementing sustainable business models for SBIRT in healthcare environments. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 670 or IBC 780 (Integrated Behavioral Health Interventions for Substance) |
| IBC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 701 | Models of Integrated Primary Care | Provides an overview of the primary care environment as well as current models of integrated primary behavioral health care. Reviews and critiques models of health care based on their success in impacted patient health outcomes and improving physician satisfaction, along with fiscal and care delivery systems for each. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 704 | Psychopathology & Personality in Integrated Primary Care | Covers the basic principles of the Biodyne Model, which are applicable to all behavioral health cases, both in outpatient mental health settings and in integrated care settings. Core knowledge forms the basis for success as a behavioral care provider in integrated medical settings. Includes common psychotherapist mistakes, evidence-based treatment, basics of the Biodyne Model, survey of integrated care approaches, defense mechanisms, case conceptualization strategies for maximum efficiency, and when to refer a patient for specialty care. Presents in detail common conditions (anxiety and depression), with a focus on how these conditions can be subcategorized for maximum treatment efficiency. Emphasizes the development of comprehensive treatment plans (including psychotropic medications, group programs, and other modalities). Presents didactic material in the context of actual cases. Strong focus on case examples, both illustrative cases provided by the instructor and the students' cases (past and/or current). | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 708 | Evidence-Based Behavioral Intervention III | Covers advanced principles of evidence-based integrated behavioral care in primary care and other medical settings. Continuation and third course in the Evidence Based Behavioral Intervention I and II sequence. Further develops evidence-based approaches in the assessment and treatment of children and families and deepens and expands the skills in specific applications of assessment and treatment modalities for adults. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 712 | Population-Based Behavioral Health Management | Overview epidemiology for health care followed by population-based approaches to behavioral intervention. Epidemiology includes concept of populations; descriptions and definitions of health and disease; measurement of health (measures, morbidity, mortality and health); designs for studying the health of populations and standardization of population health measures. Population-based management includes definitions of medical management, planning health care for populations and population health outcomes, quality of care and economic analysis of population-based interventions, adjunctive treatments as a core component of population-based interventions. Also, advanced application of population-based behavioral interventions with a focus on design, measures, analysis, results and discussion of current approaches. Includes predictive modeling methods for defining populations; interventions focusing on stepped-care approaches; engagement strategies, interventions, measurement, and follow-up. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 714 | Quality and Performance Measurement, Improvement, and Incentives in Health Care | Overview of healthcare quality management, emerging models of healthcare performance measurement, and models of pay for performance incentives in healthcare designed to reward providers for attaining quality of care goals. Prepares behavioral clinicians to provide services that are consistent with best practices in quality management and performance measurement in healthcare and to provide care that is consistent with performance incentive programs that are present or on the horizon. A key characteristic of healthcare reform is increased focus on provider quality of care, accountability for quality via performance measurement, and aligning provider incentives to meet national and regional quality of care performance targets. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 718 | Healthcare Systems: Organization, Delivery and Economics | Provides an overview of the U.S. healthcare system with a focus on economics and policy. Primary goals of the course are to enable students to recognize the relevance of economics to healthcare and to apply economic principles to better understand health-related issues; understand the U.S. healthcare delivery system in the context of social, policy, and economic factors; evaluate the evolving nature of healthcare reform initiatives and their implications for clinical practice, financing, research and policy; analyze public healthcare policy from an economic perspective. Students also focus on behavioral healthcare economics and policy and the economics of behavioral health services in medical settings. Students also understand the medical cost offset effect, including economic benefits of behavioral interventions for comorbid medical and behavioral conditions, measurement of medical cost-offset, and cost-offset for psychopharmacology and specific behavioral conditions. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 720 | Behavioral Health Entrepreneurship | Provides an introduction to the essential entrepreneurship skills for the behavioral healthcare clinician. Focuses on entrepreneurial skills designed to prepare the behavioral clinician to start a new business venture or revitalize an existing organization or business, to meet the needs of the evolving healthcare system and marketplace. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 724 | Behavioral Health Management | Presents an introduction to the roles and responsibilities of supervisor/manager in a healthcare organization. Provides behavioral health professionals moving into management with the necessary knowledge base and skills to be an entry-level manager and focuses on the further knowledge acquisition needed to become an experienced, effective manager and leader. In addition, discusses the larger context in which healthcare businesses operate—healthcare reform, regulations and technological changes. Participants take time to look at personal characteristics, interpersonal styles and presentation that affect how one is perceived and responded to in an organization. Too often we have observed individuals with high-level clinical skills moving into management without the requisite skills and understanding of issues, restricting their ability to be successful. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 724 or IBC 780 (Behavioral Health Management) |

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| IBC | 728 | Cultural Diversity, Health and Illness | Focuses on the relationship among cultural diversity, health and illness, and multicultural psychotherapy in primary care and other healthcare settings. Prepares behavioral clinicians to identify the relationship between cultural diversity and health and illness and to use effective psychotherapy informed by cultural diversity in primary care and related medical settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IDN | 101 | Elementary Indonesian I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| IDN | 102 | Elementary Indonesian II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: IDN 101 with C or better |
| IDN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| IDN | 201 | Intermediate Indonesian I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 102 with C or better |
| IDN | 202 | Intermediate Indonesian II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 201 with C or better |
| IDN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| IDN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| IED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 410 | History American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Credit is allowed for only IED 410 or 510 |
| IED | 430 | Lang/Literacy-Indig Peoples | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Credit is allowed for only IED 430 or 530 |
| IED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| IED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| IED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |

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| IED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 510 | History of American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student. Credit is allowed for only IED 410 or 510 |
| IED | 530 | Language/Literacy-Indig People | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student. Credit is allowed for only IED 430 or 530 |
| IED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 210 | Introduction to Industrial Engineering | History of IE: IE career paths; ethical, social, and contemporary issues; introduces IE techniques, methods, and their application; case studies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: IEE 100(or BME100,CHE100,CEE100,CSE101,ECE100,EEE101,EGR101,FSE100,MAE100,MSE 100, or SES 100) with C or better; MAT 265 (or MAT 270) with C or better |
| IEE | 220 | Business and Industrial Engineering | Introduces business for industrial engineers, including business/financial structures, fundamentals of cost and accounting, role of business/engineering in society. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student: Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: minimum 25 earned hours |
| IEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 300 | Economic Analysis for Engineers | Economic evaluation of alternatives for engineering decisions, emphasizing the time value of money. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student: MAT 265 or 270 with C or better and Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: MAT 265 or 270 with C or better |
| IEE | 305 | Information Systems Engineering | Overview of computer and information systems applications. Topics include client/server, distributed computing; networks; process modeling; e-commerce; enterprise applications; Internet. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student and CSE 205 OR other majors with minimum 3.00 GPA and CSE 205 |
| IEE | 369 | Work Analysis and Design | Planning, analysis, and design of methods of accomplishing work. Emphasizes human factors, work planning, methods analysis and design, and work measurement. Applications in diverse fields. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student or Engineering Management Minor/Concentration; Pre- or corequisite(s): FIN 300 or IEE 300 |
| IEE | 376 | Operations Research Deterministic Techniques/Applications | Industrial systems applications with deterministic operations research techniques. Resource allocation, product mix, production, transportation, task assignment, networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): CSE 205 with C or better; MAT 242, 342 or 343 with C or better; or Industrial Engineering graduate student |
| IEE | 380 | Probability and Statistics for Engineering Problem Solving | Applications-oriented course with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate or Engineering Management minor; MAT 266 (or 271) with a C or better; or Industrial Engineering graduate student |
| IEE | 381 | Lean Six Sigma Methodology | Define, measure, analyze, improve and control (DMAIC) steps of six sigma methodology for business and quality improvement. Reviews the necessary statistical tools and illustrates their integration into the problem-solving process. Overview of lean principles and design for six sigma. Unique features of applying six sigma and DMAIC in transactional and service organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 380 with C or better; Credit is allowed for only IEE 381, 498 (Six Sigma Methodology) or 498 (Six Sigma Green Belt) |
| IEE | 382 | Probability and Statistics Lab | Applied modeling and data analysis using Excel and Minitab. | N | LAB | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Pre-requisites: Industrial Engineering or Engineering Management BSE student; Co-requisite: IEE 380 |
| IEE | 385 | Engineering Statistics: Probability | Conditional probability, common probability models, Goodness-of-fit tests and reliability models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): undergraduate Fulton Engineering major or Engineering Management minor with IEE 380 with C or better OR graduate Industrial Engineering major |
| IEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 405 | Developing Information Systems Applications | Analysis and design of distributed information system applications using object and relational architectures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |
| IEE | 412 | Introduction to Financial Engineering | Intensive exploration course of three phases: (1) a preparation phase for the terminology and financial lingo to be used throughout the semester, (2) introduction of more advanced financial topics such as portfolio formation, assessment and traditional portfolio theory, (3) several financial engineering topics such as the application of stochastic models to stock and derivatives pricing and financial risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): IEE 300 and 380 with C or better |
| IEE | 421 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s) with C or better: IEE 376, 380, 385. Credit is allowed for only IEE 421 or IEE 498 (Urban Operations Research) or IEE 521 or IEE 598 (Urban Operations Research) |
| IEE | 426 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: IEE 376 and 380 with C or better; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 431 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate, Digital Culture (Media Processing) BA, or Engineering Management minor or concentration; junior or senior standing. Credit is allowed for only IEE 431 or IEE 541 |
| IEE | 437 | Human Factors Engineering | Studies the human psychological and physiological factors that underlie the design of equipment and the interaction between people and machines. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student OR other majors with minimum 3.0 GPA; Credit is allowed for only IEE 437 or 547 |

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| IEE | 454 | Risk Management | Methods and tools for identifying, assessing, mitigating and controlling risk in business and engineering design activities. Decision tools include cost-benefit analysis, decision trees, value of information, Bayesian statistical decision making, fault trees, and failure modes and effects analysis (FMEA). | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: ECN 221 or IEE 380 with C or better; Engineering major OR Engineering Management Minor/Concentration; Junior or Senior student |
| IEE | 456 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Junior or senior Engineering student OR Engineering Management Minor/Concentration; Credit is allowed for only IEE 456 or 556 |
| IEE | 458 | Project Management | Life-cycle processes for selecting and managing large-scale projects to ensure successful completion. Topics include project phases, defining milestones, work breakdown structure, group decision making and teamwork, organizational structure, human resource management, technological and economic feasibility, configuration management, budget control, and resource allocation and scheduling. Use of modern tools for planning and controlling project performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: ECN 221 or IEE 380 with C or better; Junior or senior Engineering OR Engineering Management Minor/Concentration student |
| IEE | 461 | Production Control | Techniques for the planning, control, and evaluation of production systems. Forecasting, inventory control, scheduling, enterprise requirements planning, supply chain design, and coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; IEE 376 with C or better; IEE 380 with C or better |
| IEE | 470 | Stochastic Operations Research | Modeling and analysis with emphasis on stochastic operations research. Models for stochastic processes, including Markov chains, queueing and decision analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Industrial Engineering, Engineering Management or Computer Science undergraduate; IEE 376 and IEE 385 with C or better; or Industrial Engineering graduate; Credit is allowed for only IEE 470 or 598 (Stochastic Operations Research) |
| IEE | 474 | Quality Control | Basic statistical process control techniques, capability analysis, design of experiments, and acceptance sampling plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 380 with C or better |
| IEE | 475 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queuing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or other majors with minimum 3.00 GPA; CSE 205 and IEE 380 with C or better; Credit is allowed for only IEE 475 or IEE 545 |
| IEE | 477 | System Dynamics and Thinking | Methods for the modeling and analysis of system dynamics; metrics to measure business performance; continuous simulation tools for evaluation of system performance over time. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: CSE 205 with C or better; IEE 380 with C or better; Credit is allowed for only IEE 477 or 498 (System Dynamics Engineering) |
| IEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | |
| IEE | 485 | Systems Design Capstone I | Senior capstone project provides students with the skills required to effectively complete a capstone project in design and development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): BSE Engineering Management major with pre- or corequisite(s): IEE 475 or 477; or BSE Industrial Engineering major with IEE 376 with C or better and pre- or corequisite(s): IEE 475 or 477 |
| IEE | 486 | Systems Design Capstone II | Project in design and development. Individual or team capstone project in creative design and synthesis. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Pre-requisites: BSE Engineering Management or Industrial Engineering major; Senior standing; IEE 485 with C or better |
| IEE | 490 | Project in Design and Development | Individual or team capstone project in creative design and synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): BSE Industrial Engineering major; IEE 376 with C or better and pre- or corequisite(s): IEE 475 OR BSE Engineering Management major; pre- or corequisite(s): IEE 475 |
| IEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-6 | | Prerequisite(s): Barrett Honors student |
| IEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-7 | | |
| IEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |
| IEE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 505 | Information Systems Engr | Studies information systems application engineering. Topics include information technology, data modeling, data organization, process mapping, application and database engineering, and user interface development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |

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| IEE | 506 | Web-Enabled Decision Support Systems | Development and analysis of Web-enabled applications for decision support. Topics include: (1) Web application development using ASP.NET; (2) design for computing scalability, interface usability and cyber security; and (3) use of application development skills and design concepts to develop a decision support system consisting of database, analytical data processing, expert knowledge and reasoning, and user-friendly interface for enabling transitions from data to information, knowledge and decisions. Knowledge of database development is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 506 or 598 (Design of Computational Systems) |
| IEE | 511 | Analysis of Decision Processes | Methods of making decisions in complex environments and statistical decision theory, effects of risk, uncertainty, and strategy on engineering and managerial decisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 498 (Analysis of Decision Processes) or 511 |
| IEE | 512 | Introduction to Financial Engineering | Introductory course on financial engineering covering traditional portfolio theory, forwards, futures, financial stochastic models, option pricing, and risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 520 | Statistical Learning for Data Mining | Surveys data analysis methods for massive data sets and provides experience in analysis with computer software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 515 or IEE 572 or IEE 578; Credit is allowed for only BMI 555 or IEE 520 |
| IEE | 521 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 421, 498 (Urban Operations Research), 521 or 598 (Urban Operations Research) |
| IEE | 526 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 530 | Enterprise Modeling | Focuses on social, economic, and technical models of the enterprise with emphasis on the management of technological resources. Includes organization, econometric, financial, and large-scale mathematical models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 533 | Scheduling | Provides the basic theory of scheduling and introduction to the applications domain. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 534 | Supply Chain Modeling/Analysis | Techniques for modeling and analysis of supply chains. Inventory management, transportation/location models, value of information, channel alignment, risk pooling, contracts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 574 with C or better |
| IEE | 535 | Intro Intl Logistics Systems | Exploratory project-oriented course that addresses domestic and international logistics practices from a high-level descriptive perspective and an analytical model-based perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 541 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only IEE 431 or 541 |
| IEE | 545 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queueing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 475 or 545 |
| IEE | 547 | Human Factors Engineering | Study of people at work; designing for human performance effectiveness and productivity. Considerations of human physiological and psychological factors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 437 or 547 |
| IEE | 552 | Strategic Technological Planning | Studies concepts of strategy, strategy formulation process, and strategic planning methodologies with emphasis on engineering design and manufacturing strategy, complemented with case studies. Presents and uses an analytical executive planning decision support system throughout course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 556 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. Graduate students are expected to have a background in and understanding of large-scale systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 456, 556 or 598 (Intro to Systems Engineering) |
| IEE | 561 | Production Systems | Understanding how factories operate, how performance is measured, and how operational changes impact performance metrics. Operational philosophies, increasing production efficiency through quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 570 | Advanced Quality Control | Process monitoring with control charts (Shewhart, cusum, EWMA), feedback adjustment and engineering process control, process capability, autocorrelation, selected topics from current literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 571 | Quality Management | Total quality concepts, quality strategies, quality and competitive position, quality costs, vendor relations, the quality manual, and quality in the services. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 572 | Design Engineering Experiments | Analysis of variance and experimental design. Topics include strategy of experimentation, factorials, blocking and confounding, fractional factorials, response surfaces, nested and split-plot designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |

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| IEE | 573 | Reliability Engineering | Nature of reliability, time to failure densities, series/parallel/standby systems, complex system reliability, Bayesian reliability, and sequential reliability tests. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 574 | Appl Deterministic Oper Rsch | Develops advanced techniques in operations research for the solution of complex industrial systems problems. Goal programming, integer programming, heuristic methods, dynamic and nonlinear programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Industrial Engineering MS, MSE or PHD student |
| IEE | 575 | Appl Stochastic Oper Rsch Mlds | Formulate and solve industrial systems problems with stochastic components using analytical techniques. Convolution, continuous-time Markov chains, queues with batching, priorities, balking, open/closed queuing networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 578 | Regression Analysis | Regression model building oriented toward engineers and physical scientists. Topics include linear regression, diagnostics, biased and robust fitting, nonlinear regression. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 579 | Time Series Analy/forecasting | Forecasting time series by regression-based, exponential smoothing, and ARIMA model techniques; uses digital computer programs to augment the theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 581 | Six Sigma Methodology | The six sigma process improvement strategy of define, measure, analyze, improve, and control (DMAIC). Integrates and deploys statistical methods and other six sigma problem solving via the DMAIC framework. Requires background in undergraduate engineering statistics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 582 | Response Surfaces/Process Opt | Classical response surface analysis and designs including steepest ascent, canonical analysis, and multiple responses. Other topics include process robustness studies, robust design, and mixture experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD; IEE 572 with C or better |
| IEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 585 | Six Sigma Capstone. | The DMAIC (define, measure, analyze, improve, control) improvement strategy is applied in the formulation and execution of a six sigma project. | N | PRA | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PHD student |
| IEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | Pre-requisite: Engineering Graduate student |
| IEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 605 | Foundations of Information Systems Engineering | Introduces science and engineering technologies of information systems design and analysis with focus on industrial engineering applications. Topics include: design and analysis of computational algorithms; and data mining techniques for classification, clustering, feature extraction and data reduction problems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Industrial Engineering Graduate student; Credit is allowed for only IEE 598 (Found Info Syst Engr) or 605 |
| IEE | 620 | Optimization I | First course of the PhD-level deterministic course series. Covers foundations of optimization and linear programming. Prior working knowledge of linear algebra and knowledge of how to formulate linear programs is required for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IEE | 622 | Optimization II | Introduces computational methods to solve optimization problems with integer variables and the mathematical theory behind them. Follows formulation of integer programming models with a survey of relaxation, decomposition and cutting-plane methods. Discusses various practical problems such as facility location, transportation and distribution problems. Assigns computational examples using the software IBM ILOG OPL. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 620; Credit is allowed for only IEE 622 or 598 (Optimization II) |
| IEE | 640 | Probability & Stochastic Processes | Presents fundamentals of probability and stochastic processes from a non-measure theoretic point-of-view to develop (a) basic model building and probabilistic reasoning skills, and (b) an understanding of important qualitative characteristics of some basic stochastic processes used to model dynamical systems with noise. Topics include a review of probability theory with particular attention to conditional probability and expectation, Markov chains; Renewal theory and the Poisson process. Considers applications in reliability, inventory theory, queueing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 470, Graduate Industrial Engineering major; Credit is allowed for only IEE 598 (Prob & Stoch Model) or 640 |
| IEE | 670 | Mathematical Statistics | Introduction to the field of mathematical statistics at a level intended for first-year PhD students in Industrial Engineering. Builds a solid background in the principles, concepts, and techniques of mathematical statistics. Prepares students for advanced study and research in statistics, and is useful for understanding statistical data analysis techniques and developing statistical thinking. Completion of at least one course in probability and statistics is required prior to taking this class. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 672 | Adv Topics-Experimental Design | Multilevel and mixed-level factorials and fractions, design optimality, incomplete blocks, unbalanced designs, random effects and variance components, analysis of covariance. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD student; IEE 572 with C or better |
| IEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PHD student |
| IEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 100 | Introduction to Information Technology | Project-based introduction to the key concepts, tools and devices underlying today's technologies. Introduces computer hardware, software and system architecture, the Internet, the World Wide Web and information technology ethics. Forms a foundation for future courses offered in the Information Technology major and the information technology discipline. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | |
| IFT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-3 | | |
| IFT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 200 | Information Modeling, Storage and Retrieval | Notations, tools and languages for modeling, representing and manipulating information; database creation, access and management in the context of a controlling application. Analyzes information storage needs and design of an appropriate representation. Project-based access to information through tools and languages such as structured query language. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |

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| IFT | 201 | Computer and Network Systems: Organization and Administration | Fundamentals of computer networks, computer organization and computer operating systems. Components, tools and languages for configuring and administering computer systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |
| IFT | 202 | Foundations of Information and Computer System Security | Project-based introduction to privacy, ethics, legal, social and professional responsibilities for information technology. Principles of information security and assurance and their implications on access. Tools and methods to identify intrusion, best security practices. Securing communications and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: IFT 201 |
| IFT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-5 | | |
| IFT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 301 | Introduction to Interactive Media | Human-computer interaction design for rich media systems. Introduces design processes, tools and principles for applications that are highly interactive with their users and which include multiple input/output modalities and multimedia. Project-driven course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 100 and 200 |
| IFT | 359 | Internet Networking Protocol | Computer networking for application, transmission control and network layers using the Internet protocols as a model; reliability and security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 250 or IFT 201 or BAS major |
| IFT | 383 | Shell and Script Programming with UNIX | UNIX operating system programming of shells, environment and 4th-generation languages and tools, such as sed, awk, perl, grep, make. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 100 or BAS major |
| IFT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 401 | Information Technology Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): senior standing |
| IFT | 402 | Information Technology Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: IFT 401 |
| IFT | 481 | Information System Security | Implementation, development, and analysis of computer and network security policies, legal ramifications and development and analysis of risk management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 359 (or CST 359); IFT 201 |
| IFT | 482 | Network Forensics | Use and creation of advanced network forensics tools: intrusion detection and prevention, honeynets, traffic routing and management, and data reduction and graphing tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 481 (or CST 481) |
| IFT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | |
| IFT | 488 | Systems Administration of UNIX | UNIX administration of system and user services using command line and GUI tools. System security and forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 386 or IFT 201; Pre- or corequisite(s): IFT 383 (or CST 383) |
| IFT | 489 | Network Administration with TCP/IP | Configuration and installation of networks: addressing, routing, naming, and LAN and MAN services. Network security checking, monitoring, and basic forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 359 (or CST 359); Pre- or corequisite(s): IFT 383 (or CST 383) |
| IFT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IFT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-7 | | |
| IFT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-3 | | |
| IFT | 510 | Principles of Computer and Information Technology | Comprehensive introduction to computer and information technology (IT). Provides a detailed understanding of computer architecture, system software and important related issues in an IT context. Forms a technical foundation for understanding current technologies and how they work. Topics include principles of systems' physical architecture, operating systems and application software, storage and systems management as well as current developments in cloud computing, green IT, social networking systems, and internet search. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IFT | 520 | Principles of Telecommunication Technology | Basic communication technology concepts from an information technology perspective. Addresses signals, spectra and bandwidth, attenuation, distortion and noise; filtering, equalizing, modulation and multiplexing; information measurement, source and channel coding, channel capacity, baseband data transmission, digital modulation and spread-spectrum systems; local area networks and architecture and performance; layered network architecture, protocols, switching techniques, TCP/IP, traffic engineering and basic capacity analysis. Focuses not on detailed component design but on understanding the interrelationships of these concepts and telecommunication systems to support broad system design and management. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 530 | Information Analysis, Modeling, Representation, and Communication | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 540 | Software Development for Information Technology | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 530 |
| IFT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| IMD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| IMD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| IMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 120 | Drawing for Industrial Design | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for industrial design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major |
| IND | 121 | Principles for Industrial Design I | Industrial design as a language and process for creative thinking and realization. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major. Corequisite(s): IND 122 |
| IND | 122 | Principles for Industrial Design II | Continued exploration of industrial design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): IND 120 with C or better; Environmental Design or Industrial Design major. Corequisite(s): IND 121 |
| IND | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 227 | Visual Methods for Problem Solving | Introduces conceptual design activity based on the mind-eye-media feedback loop. Graphic language used to represent conjecture, analysis, synthesis of objects, and their contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student, IND 122 with C or better; Passed Milestone; Co-requisite: IND 260 |
| IND | 228 | Imaging and Visualization | Design activities stressing graphic language abstraction practiced for presentation. Discusses structure of criticism, including description, interpretation, and evaluation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 227 with C or better; Co-requisite: IND 261 |
| IND | 242 | Materials and Design | Materials application in design. Introduces characteristics and properties of metals and organic materials, including plastics, and inorganic materials. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 243 | Design for Ecology and Social Equity | Explores the role of design in the ecological crisis; materials, processes, strategies and methods to design more ecologically friendly and socially equitable products. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 260 | Industrial Design I | Introduces the method and process of the industrial designer. Determinants necessary in small product design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 122 with C or better; Passed Milestone; Co-requisite: IND 227 |
| IND | 261 | Industrial Design II | Issues of physical form development related to product and design: form development properties of paper, fibers, wood, metal, and plastics. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 260 with C or better; Co-requisite: IND 228 |
| IND | 316 | 20th-Century Design I | Modern European and American design from 1900 to 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | |
| IND | 317 | 20th-Century Design II | Modern European, Asian, and American design since 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | |
| IND | 327 | Presentation Graphics | Studies methods for portfolio and professional product presentation using graphic media for information transfer. Stresses aesthetic judgment, organization, and craftsmanship. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Industrial Design student; Co-requisite: IND 360 |
| IND | 328 | Graphics for Industrial Design | Investigates and applies applications and planning to the development of an identity for a product line structured as a system. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 327 with C or better; Co-requisite: IND 361 |
| IND | 344 | Human Factors in Design | Man-machine environment systems; human characteristics and behavior applied to design of products, systems, and their operating environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 354 | Principles of Product Design | Influences of physical and mechanical concepts in product design; mechanisms, kinematics, and fastening systems. Concepts of analysis for product design. Influences of concepts on aesthetics. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: PHY 111 with C or better; Digital Culture: Design, Industrial Design BSD, or Pre-Industrial Design major |
| IND | 360 | Industrial Design III | Methods of visual thinking, conceptualization, and ideation related to building skill levels in professional design presentation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 261 with C or better; Co-requisite: IND 327 |
| IND | 361 | Industrial Design IV | Emphasizes developing ideas into a complete functional product, including survey and application of aesthetics, human factors, materials, and manufacturing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 360 with C or better; Co-requisite: IND 328 |
| IND | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 460 | Design Project I | Complete analysis of the product unit as an element of mass production, featuring marketing, technology, human factors, and visual design. Emphasizes professional standards. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 361 with C or better; Co-requisite: IND 484; IND 470 |
| IND | 461 | Design Project II | Product design, with emphasis in systems interaction. Culmination of design process and technique. Encourages individual project direction. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design BSD student; IND 460 with C or better |

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| IND | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| IND | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| IND | 470 | Professional Practice for Industrial Design | Business procedures, management techniques, accounting systems, ethics, and legal responsibilities of the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisite: Industrial Design student; Co-requisite: IND 460 or Design Studies minor student |
| IND | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Industrial Design student; IND 361 with C or better. Co-requisite: IND 460 |
| IND | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| IND | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IND | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 521 | Advanced Industrial Design Studio I | Design language, motivation and inspiration, form exploration sketching, rough form study mock-ups, form development, and presentation. Product redesign. Students create new design language proposals for an existing product and redesign the product based on one of these languages. Provides instruction and opportunities to understand product design language and how to redesign existing products with different design guidelines. Results include evidence of concept development (sketches, drawings, models), functional development, human factors and ergonomic considerations, materials and process specifications; sustainability recommendations, and appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Industrial Design major. Credit is allowed for only IND 521 or IND 590 (Advanced Industrial Design Studio I) |
| IND | 522 | Advanced Industrial Design Studio II | New product development with emphasis on design research, problem solving and functional/aesthetic development. Preliminary research about human behavior and health promotion. Based on the research findings, students conduct design research in teams and work on individual design projects. Student project results include evidence of concept development (sketches, drawings, models); functional development; human factors and ergonomic considerations; materials and process specifications; sustainability recommendations; and final appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion, and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 521. Corequisite(s): DSC 501. Credit is allowed for only IND 522 or IND 590 (Advanced Industrial Design Studio II) |
| IND | 544 | Human Factors Systems and Documentation | Advanced topics associated with theory and methods of human factors in design. Individual projects stressing problem organization, evaluation, and documentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| IND | 548 | Design for Sustainable Development | Research on designing systems that are economically viable, ecologically friendly, and socially equitable. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IND | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 621 | Advanced Industrial Design Studio III | Structured around the Design School traveling-studio model, this studio challenges students to identify new design concepts that improve society and the natural environment while also delighting users and creating value for business. For approximately one week, students travel to an off-campus location to examine a local condition there for which new design solutions are needed. Students return to ASU and continue working on the project for the semester. Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 522 |
| IND | 622 | Advanced Industrial Design Studio IV | Challenges students to create new design concepts that improve society and the natural environment while also delighting users and creating value for business. Requires some independent direction by the student; however, instructor assigns deadlines and expectations for deliverables, and requires cooperation and collaboration among students. Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 621 |
| IND | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 111 | Interior Design Issues and Theories | Interiors issues, theories, and philosophies. Emphasizes unique social and cultural factors that shape 20th-century design concepts. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| INT | 120 | Design Drawing and Media | Visual thinking; Development of freehand drawing techniques as a language and tool to explore, communicate, and process ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Interior Design major |
| INT | 121 | Introduction to Computer Modeling for Interior Design | Computers in interior design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Credit is allowed for only INT 121 or 320 |
| INT | 123 | Introduction to Computer-Aided Design and Building Information Modeling | Introduces AutoCAD computer-aided design and Revit building information modeling principles and strategies for designers of the built environment. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 131 | Design and Human Behavior | Applies conceptual design to issues of programming and space planning, user needs, and behavior. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | SB | |
| INT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 221 | Principles of Design | Applied visual vocabulary: studio experience exploring applications, process and conceptual development of the principles of order and composition. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 120 with C or better; Environmental Design or Interior Design major. Corequisite(s): INT 222 |
| INT | 222 | Principles of Design Lecture | Applies the visual vocabulary; explores the principles of organization through examination of historical precedence and contemporary interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Environmental Design or Interior Design major. Corequisite(s): INT 221 |
| INT | 223 | Drafting for Interior Design | Orthographic, paraline, axonometric, and perspective projection; shades and shadows; and basic descriptive geometry for interior designers. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 261 |
| INT | 253 | Interior Materials, Finishes, and Specifications | Survey, evaluation, and specification of materials, finishes, and performance criteria for interiors. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |
| INT | 261 | Interior Design Studio I: Residential | Studio problems in interior design related to behavioral response in personal and small-group spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 223 |
| INT | 262 | Interior Design Studio II: Hospitality | Focuses on environments that entertain or host the public, including but not limited to nightclubs, restaurants, theaters, hotels, city and country clubs, golf facilities, cruise ships and conference facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |

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| INT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 310 | History of Interior Design I | Evolution of interior design as an expression of cultural influences from the ancient periods to 1835. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: ARS 102 with C or better |
| INT | 311 | History of Interior Design II | Evolution of interior design as an expression of cultural influences 1835 to present. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: INT 310 with C or better |
| INT | 341 | Interior Codes: Public Welfare and Safety | Codes and regulations as performance criteria for interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisite: Interior Design student; Co-Requisites: INT 253; INT 262 |
| INT | 351 | Ambient Environment | Surveys environmental control systems, acoustics, and lighting issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design major; PHY 101 with C or better. Co-requisites: INT 352, INT 362 and INT 381; OR Digital Culture: Design major |
| INT | 352 | Construction Methods in Interior Design | Design theory related to analysis, materials, and building techniques of horizontal and vertical construction in interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisites: INT 362; INT 381 |
| INT | 354 | Construction Documents | Elements of construction drawing sets, application of codes and specifications, and contract administration. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisite: INT 363 |
| INT | 362 | Interior Design Studio III: Hospitality and Retail | Investigates interior design issues in hospitality and retail environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; Co-requisites: INT 351, INT 352 and INT 381 |
| INT | 363 | Interior Design Studio IV | Explores the poetics of materials and their assemblage in the design of public and private spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 362 with C or better. Co-requisite: INT 354 |
| INT | 381 | Preinternship Seminar | Preparation of internship materials that produce and enhance a successful internship experience. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite: INT 262 |
| INT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 412 | History of Decorative Arts in Interiors | Design of decorative arts as an expression of cultural influences and as an extension of interior spaces. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Prerequisite(s): INT 311 with C or better. Credit is allowed for only INT 412 or INT 515 |
| INT | 413 | History of Textiles in Interior Design | Cultural and historical expression of textiles as related to interiors. | N | PRA | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 412 with C or better. Credit is allowed for only INT 413 or INT 516 |
| INT | 415 | Latin American Design | The impact of Latin American culture and civilization on design throughout the Americas. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Minimum Junior standing |
| INT | 446 | Furniture Design and Production | Design, construction, cost estimating, and installation in interior furniture and millwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design BSD, Interior Architecture BSD or Industrial Design BSD student |
| INT | 464 | Interior Design Studio V: Work Environments | Studio problems in interior design-related issues in work environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 363 with C or better. Co-requisites: INT 484; INT 471 |
| INT | 465 | Interior Design Studio VI: Institutional Design | Advanced interior design problem solving related to institutional facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 464 with C or better. Co-requisite: INT 472 |
| INT | 471 | Facilities Management | Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 472 | Professional Practice for Interior Design | Business procedures, project control, fee structures, and professional product liabilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Interior Design student; Co-requisite: INT 465 |
| INT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Interior Architecture BSD student; DSC 483 or INT 381 with Y grade |
| INT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| INT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| INT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 515 | Decorative Arts in Historic Interiors: A Thematic Overview | A thematic overview of decorative arts used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 412 or INT 515 |
| INT | 516 | Textiles in Historic Interiors: Appearance, Function, Symbolism | Overview of textiles used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 413 or INT 516 |
| INT | 521 | Advanced Interior Architecture Studio I | Studio problems in interior architecture related to the integration of building structure and systems with the behavioral response to personal spaces. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Interior Architecture major. Credit is allowed for only INT 521 or INT 590 (Advanced Interior Architecture Studio I) |
| INT | 522 | Advanced Interior Architecture Studio II | Investigates interior architecture issues, including construction, technology, programmatic and environmental determinants. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 521; Corequisite(s): INT 527; Credit is allowed for only INT 522 or INT 590 (Advanced Interior Architecture Studio II) |
| INT | 527 | Contemporary Design Theory | Aesthetic, political, economic, and social theories that have shaped modern design; theory as the basis for design philosophies. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 529 | Design Criticism | Applies critical methods to design as material culture and human expression; evaluates achievement versus intention. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| INT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 621 | Advanced Interior Architecture Studio III | Structured around the Design School traveling-studio model, based on design problems emphasizing the global context of interior architecture as it influences interior space and architectural form. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 522 |
| INT | 622 | Advanced Interior Architecture Studio IV | Individual, student-initiated capstone project reflecting a culminating synthesis of interior architecture ideas. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 621 |
| INT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| INT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 101 | Elementary Italian I | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 102 | Elementary Italian II | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 110 | Intensive Italian I | Proficiency-oriented language course designed to achieve the maximum level of proficiency in an intensive and dynamic communicative environment. Class time is spent on a variety of fast-paced communicative activities focused especially on the development of speaking skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| ITA | 111 | Accelerated Elementary Italian | Accelerated elementary Italian for experienced language learners. Emphasizes reading, writing, listening, speaking, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| ITA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| ITA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 201 | Intermediate Italian I | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on both spoken and written genres of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 202 | Intermediate Italian II | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on values of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 210 | Intensive Italian II | Proficiency-oriented language course designed to achieve the maximum level of proficiency in an intensive and dynamic communicative environment. Class time is spent on a variety of fast-paced communicative activities focused especially on the development of speaking skills. Class meets four times a week. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): ITA 102 or 110 or 111 with C or better |
| ITA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 311 | Italian Conversation | Engages students in different oral/aural activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 202 with C or better |
| ITA | 312 | Italian Composition | Engages students in different written activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & G | Pre-requisites: ITA 202 with C or better |

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| ITA | 315 | Italian Civilization | Students read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 202 with C or better |
| ITA | 319 | Italian for Professions | Read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ITA 202 with C or better |
| ITA | 321 | Introduction to Italian Literature I | Studies the development of early Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 322 | Introduction to Italian Literature II | Studies the development of modern and contemporary Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 202 with C or better |
| ITA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 413 | Advanced Italian | Development and assessment of advanced spoken and written Italian proficiency through activities using all four skills. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 311 or 312 with C or better |
| ITA | 420 | Italian Cinema | Major trends of Italian cinema from the post-war period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 430 | Italian Literature of the Middle Ages | Emphasizes Stil Novo, Dante's minor works, Petrarch, and Boccaccio. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 441 | Dante: Divina Commedia | Critical reading of the three Cantiche (Inferno, Purgatorio, and Paradiso). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 443 | Italian Literature of the Renaissance | Emphasizes Lorenzo de'Medici, Poliziano Castiglione, Machiavelli, Ariosto, and Tasso. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 449 | 20th-Century Italian Literature | Major works, figures, and movements of contemporary Italian literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ITA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ITA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ITA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ITA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 594 | Conf And Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JAC | 101 | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |
| JHR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 501 | Proseminar in Social Justice and Human Rights | Classical and contemporary theories of social justice and human rights in the context of current local, national, and international issues. Special reference made to the roles of both governmental and nongovernmental organizations in addressing social justice and human rights issues. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 506 | Grant Writing for Social Justice and Human Rights | Seminar in grant writing and fund raising for social justice and human rights. Provide an introduction to the grassroots grant writing and fund raising process, with a particular focus on justice-oriented nonprofit and international nongovernmental organizations. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------|
| JHR | 510 | Problem-Based Seminar in Social Justice and Human Rights | Interdisciplinary seminar examines current problems in social justice and human rights from several different theoretical and analytical viewpoints. May be repeated once for credit. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 511 | Community-Embedded Seminar in Social Justice and Human Rights | Interdisciplinary seminar requiring students to be placed in community organizations dealing with the course issue during the semester. Emphasizes developing effective strategies for partnerships with relevant community organizations and evaluating institutional settings, policies, and procedures from the perspective of social justice and human rights. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 525 | Action Research in Social Justice and Human Rights | Advanced practicum in engaged, community-embedded research and interpretive analysis. Gives students experience in the practice of engaged fieldwork as well as the writing it generates. | N | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JMC | 101 | Grammar for Journalists | Grammar course specifically designed to help journalism majors master the essentials of grammar. All majors must achieve an 80 percent in the course, indicating a mastery of grammar, before they can move on to any other journalism course. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major |
| JMC | 105 | Freshman Seminar | Exploring the impact of technology on the profession of journalism during the last 20 years. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Credit is allowed for only JMC 105 or 194 (Freshman Seminar) |
| JMC | 110 | Principles and History of Journalism | Fundamental principles of journalism and the evolution of those principles through the history of the U.S. news media. By understanding the history of journalism, students learn about the most critical values of the profession. This is the first of four "values" courses Cronkite students take during the four-year curriculum. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; Credit is allowed for only JMC 110 or MCO 120 |
| JMC | 120 | Studio Production | Introduces the vocabulary of production. Develops familiarity with the studio equipment, its care and operation, and basic production procedures. Covers the ability to function as a member of a production team; sound attitudes toward assignments and constructive criticism; and an appreciation of production as a tool of the communication process. Discusses career opportunities in the diverse marketplace. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication major; Credit is allowed for only JMC 120 or 194 (Studio Production) |
| JMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisite: Journalism and Broadcasting student |

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|---------|-------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMC | 201 | News Reporting and Writing | Introductory news writing course required for all Cronkite majors. Students learn the basic reporting and writing skills needed for further study in print, broadcasting, online or public relations. Students practice reporting and writing news stories with an emphasis on accuracy, newsworthiness, deadlines, objectivity and fairness. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; ENG 101, 105, or 107 with C or better; JMC 101; JMC 110 or MCO 120 with C or better |
| JMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| JMC | 301 | Intermediate Reporting and Writing | Required of all students specializing in print, online and public relations; trains students in news reporting and writing under deadline. Students produce professional-level stories that are clear, well reported and accurate for publication. Students hone their reporting techniques and learn how to cover a beat and write news, feature and enterprise stories. They gain a deeper and more sophisticated understanding of newsworthiness, journalism ethics and law and news diversity. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): JMC student; Minimum 2.50 GPA; ENG 102, 105 or 108 with C or better; JMC 201 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School or JMC 101 or 194: Grammar for Journalists |
| JMC | 302 | Sports Reporting | Intermediate sports reporting and writing techniques. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 305 | Multimedia Journalism | Software and digital tools commonly used by multimedia journalists, including shooting and editing photos and video, social media, Web analytics, basic HTML, blogging, and design for the Web. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 201 with C or better; minimum 2.50 cumulative GPA |
| JMC | 310 | Public Relations | Theory and practice of publicity, public relations, and related techniques and procedures. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC student; Minimum 2.50 GPA; JMC 201 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School or JMC 101 or 194: Grammar for Journalists |
| JMC | 313 | Introduction to Editing | Hands-on training in editing copy, photos and graphics and writing headlines and other display text for print and digital platforms. Emphasizes editing for accuracy, clarity, brevity, grammar and tone. Students practice AP style, develop news judgment and consider the ethical implications of their work. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 with C or better |
| JMC | 315 | Intermediate Reporting and Writing (Broadcast) | Intermediate broadcast news reporting and writing techniques with emphasis on audio. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 and ENG 102, 105 or 108 with C or better; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists) |
| JMC | 320 | Newscast Producing | Principles of broadcast news producing, delivered via a combined lecture/lab experience and assignments based on editorial judgment, technical skills and industry awareness. Students emerge with strategies for total newsroom management, confidence in producing news content and newscasts under deadline pressure and prepared for a variety of producer-related roles in professional newsroom environments. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 302 or JMC 315 with C or better; minimum 2.50 GPA |
| JMC | 325 | Breaking News Multimedia Reporting | Students cover breaking news for azcentral.com, gaining practical experience in an online, multimedia environment. Students work out of a Republic Media newsroom under the direction of professional editors. Students often have the opportunity to work with full-time professional reporters on big news stories, and their work may appear on azcentral.com, in The Arizona Republic and in 12 News reports. Students must commit to two full days a week, and they earn pay in addition to class credit. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 GPA; JMC 305 with C or better |
| JMC | 330 | Television Reporting | Writing, reporting and editing for television. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 315 and JMC 345 with C or better |
| JMC | 331 | Television Sports Reporting | Sports writing, reporting and editing for television. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 302 with C or better; JMC 346 with C or better; minimum 2.50 GPA |
| JMC | 345 | Videography | Students conceive, plan, shoot, write and edit television news packages in this hands-on class. Skills taught include sequencing, framing, lighting, sound, story structure, news judgment, storytelling and editing. Students may use school-supplied cameras and editing facilities but must provide a Flash Memory card and portable external FireWire Hard Drive. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists); Minimum 2.50 GPA; JMC 201 with C or better |
| JMC | 346 | Sports Videography | Develops an understanding of visual sports storytelling and crafts a compelling story with video and sound. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 351 | Photojournalism I | Teaches basic skills required to compose, shoot and prepare still photos for publication. Hands-on, with students shooting a range of assignments from news events to environmental portraits, and producing a portfolio of their work. Students may share a school-supplied Canon camera or provide their own. The camera should be a digital SLR camera body with at least a kit zoom lens, and the camera body must have a manual setting and have the ability to turn off any built-in camera flash. Students need digital media cards of at least 2 GB and an external digital card reader. Students may not use point-and-shoot cameras or cameras with Flash (built-in or external) for this class. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 201 with C or better; minimum 2.50 cumulative GPA; successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 - Grammar for Journalists) |

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|---------|-------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMC | 352 | Sports Photojournalism | Digital camera, lighting and scanning skills. Discusses ethics. Emphasizes shooting pictures for sports assignments on deadline. Recommend a DSLR camera. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 366 | Journalism Ethics and Diversity | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC student; JMC 110 with C or better; Minimum 2.50 GPA; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 Grammar for Journalists) |
| JMC | 367 | Ethics and Diversity in Sports Journalism | Explores ethical problems related to sports media in a seminar setting. Discussion-based course applies journalistic values and principles to contemporary ethical dilemmas in sports media and helps prepare students for work in the profession. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; minimum 2.50 GPA; JMC 101; JMC 110 with C or better |
| JMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 300, JMC 315, TCM 300 or TCM 315 with C or better |
| JMC | 402 | Mass Communication Law | Provides a grounding in the laws and regulations that govern various aspects of the media with a focus on First Amendment guarantees and privileges and the extent to which those have been limited by courts and lawmakers. Topics include freedom of expression, libel, privacy and obscenity. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; ENG 102, 105, or 108 with C or better; JMC 201 with C or better; minimum 2.50 cumulative GPA; minimum 56 hours |
| JMC | 410 | Turning Points in TV History | Uses historic television footage to talk about the evolution of news coverage and the ethical decisions journalists face. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 101 (or successful completion of English Grammar Exam); Credit is allowed for only JMC 410 or 494 (Turning Points in TV History) |
| JMC | 412 | Editorial Interpretation | The press as an influence on public opinion. Role of the editorial in analyzing and interpreting current events. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 413 | Advanced Editing | Builds on skills learned earlier. Students master editing skills that include AP style, grammar, headline writing and page layout as well as editing graphics and other visuals, editing Web content and uses of social media. Students hone their news judgment and learn to work quickly and accurately on deadline. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 313 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 414 | Graphic Design for Print and Web | Theory, organization, and practice of layout, typography, and design in traditional and multimedia publishing. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 305 with C or better; minimum 2.50 cumulative GPA |
| JMC | 415 | Writing for Public Relations | Develops the professional-level writing and strategic skills expected of public relations practitioners. Students learn how to design and produce strategic plans, news releases, media kits and executive communications. They are exposed to communications approaches required for different audiences and media and learn about public relations theory as well as audience research and analysis. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; JMC 270 or JMC 310 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 417 | Public Relations Campaigns | Students work with professional clients in an agency setting to research, plan and create comprehensive public relations campaign that address clients' needs. Concepts, theories and techniques relevant to public relations campaigns as well as strategic planning, campaign components and technology resources and tools. Analyzes, discusses and responds to current public relations issues and case studies. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC 415 with C or better; JMC 436 or 494 (Public Relations Research) with C or better; Minimum 2.50 GPA OR graduate Mass Communications major |
| JMC | 420 | Reporting Public Affairs | Instruction and assignments in reporting the courts, schools, government, city hall, social problems, and other areas involving public issues. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 301 with C or better; Minimum 2.5 GPA OR Graduate Mass Communication student |
| JMC | 430 | Sports Marketing and Campaigns | Creates a professional campaign engaging viewers and fans in new and meaningful ways solidifying Fox Sports Network's (FSN) position as a leader in sports programming. Students work within FSN's "Creative University" program to execute the campaign; FSN selects a campaign to implement. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; minimum 2.50 GPA; Credit is allowed for only JMC 430 or JMC 494 (Sports Marketing and Campaigns) |
| JMC | 435 | Latino and Transnational Issues | Provides background and understanding of some of the most pressing and controversial issues of the day that are taking place in the Southwest borderlands. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 101 (or successful completion of English Grammar Exam); JMC 201. Credit is allowed for only JMC 435 or 494 (Latino and Transnational Issues) |
| JMC | 436 | Public Relations Research | Students learn about the importance of research in communications, conduct research using qualitative and quantitative methods, and analyze data to understand implications within a specific communications context. They also critically evaluate published academic and professional research and are exposed to types of research and their application in the field of public relations. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 and 310 with C or better; Credit is allowed for only JMC 436 or 494 (Public Relations Research) |
| JMC | 437 | Documentary Production | Students learn the fundamentals of producing documentaries, including research, script writing, production and shooting and editing video. Students produce a long-form documentary. Students become familiar with television documentary history in order to identify trends and learn about legal and ethical issues relevant to video documentary production. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 345 or JMC 346 with C or better; minimum 2.50 GPA |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMC | 440 | Magazine Writing | Students report and write stories suitable for magazine outlets. They develop and pitch stories, learn new reporting techniques and employ literary techniques such as description and scene setting in their writing. See class notes for additional information. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.5 GPA OR graduate Mass Communication student |
| JMC | 445 | Science and Medical Writing | Develops writing, reporting, and an understanding of key concepts in science as they relate to medical science research and practice. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 450 | Issues in Coverage of Business and the Economy | Basics of business and economic reporting, one of the fastest-growing areas of journalism. Students learn what skills are needed to cover business and economic stories as well as the basics of how private companies operate and the factors that drive the economy. Students learn about opportunities in the field and hear from leaders in business journalism. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 201 with C or better; Credit is allowed for only JMC 450 or 494 (Issues in Coverage Bus/Economy) |
| JMC | 451 | Photojournalism II | Develops photojournalism and visual storytelling skills through extensive hands-on practice shooting and editing for online and print media. Introduces shooting video with DSLR cameras and becoming proficient at image cropping, writing cutlines and editing using Adobe Photoshop. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 305 with C or better; JMC 351 with C or better; Minimum 2.5 GPA; Successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101) |
| JMC | 452 | Visual Storytelling | Develops visual storytelling skills, working closely with a professional visual journalist to tell multimedia documentary stories that utilize video, still photos and text. In addition to the basics of storytelling, covers non-traditional techniques, including time-lapse, panos, HDR and star trails. Students should have basic skills in both still photography and videography and are expected to provide their own DSLR camera that can accommodate external mics and that have video capability. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA; JMC 345 or JMC 351 with C or better |
| JMC | 453 | Reporting on Business and the Economy | Trains in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 (or 315) and JMC 450 with C or better; Credit is allowed for only JMC 453 or 494 (Reporting on Business/Economy) |
| JMC | 455 | Digital Media Entrepreneurship | Students identify a marketable idea and transform it into a product and/or company. In the process, they learn about key concepts of entrepreneurship and practice skills that they can employ as entrepreneurs themselves. Students are exposed to a range of national and regional entrepreneurs and emerge with a deeper understanding of entrepreneurship's importance within the media and communications landscape. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 GPA; JMC 305 with C or better; Credit is allowed for only JMC 455, JMC 494 (Digital Media Entrepreneurship), MCO 555, or MCO 598 (Digital Media Entrepreneurship) |
| JMC | 460 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an award-winning online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 305 with C or better; minimum 2.50 cumulative GPA |
| JMC | 465 | Telling Stories with Data | Techniques and tools of reporting using data and public records as well as how to use the Internet and other online sources to find information and sources for stories. Students get experience with computer spreadsheets, database software and statistical techniques as they develop their advanced reporting skills. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; minimum 2.50 GPA |
| JMC | 470 | Depth Reporting | Teaches students how to conceptualize, report and write long-form, in-depth stories. Students deeply research a selected topic through public records, interviews and investigative reporting techniques and write an in-depth article with the goal of publication. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 473 | The Business and Future of Journalism | Exposes advanced journalism students to broad media management problems; helps students understand how essential the bottom-line and quality journalism are to the entire journalistic enterprise; helps students think about how to balance those two concerns. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism student; minimum cumulative GPA of 2.5; JMC 201 with C or better |
| JMC | 474 | Advanced Issues in 21st-Century Sports and Media | Exposes sports journalism students to challenges facing sports and media in the 21st century, including changing content models, revenue streams, and the evolving relationship between teams and media outlets. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 475 | Cronkite News: Broadcast | Students increase their knowledge of the television and multimedia news industry and receive a realistic experience in field and studio newscast production. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; JMC 330 with C or better; 2.50 cumulative GPA |

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| JMC | 476 | Public Relations Laboratory | Synthesizes and applies the theories, principles and techniques of public relations. This body of knowledge includes research, planning techniques, types of budgets, organizational systems, management styles, campaign components, types of campaigns, technology, ethics, diverse channels of communication and target audiences. Students: (1) analyze, discuss, then respond to public relations case studies; (2) develop an in-depth understanding of a client's needs; (3) conduct primary and secondary research; (4) work with a client in a team-based approach to prepare a comprehensive campaign proposal to address the client's problem or issue; (5) design and develop media products for client; (6) formally present the proposal to the client and the class. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; 2.50 cumulative GPA; JMC 417 with C or better. Credit is allowed for only JMC 476 or JMC 498 (Public Relations Lab) |
| JMC | 477 | New Media Innovation and Entrepreneurship Lab | Research and development program designed to help media companies create new and exciting multimedia products and to help students create digital media startups. Brings together students from disciplines across campus, including Journalism, business, computer engineering and design. Journalism students conduct research into developing new products and creating prototypes for those products. Students learn by doing, interacting with clients or investors, the director and the lead Web developer. Students schedule meeting times with the director to discuss projects. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 or JMC 315 and 305 with C or better; 2.50 cumulative GPA. Credit is allowed for only JMC 477 or JMC 498 (Innovation and Entrepreneurship Lab) |
| JMC | 478 | Cronkite News: Phoenix Bureau | Applies and enhances reporting, writing and multimedia skills. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; 2.50 cumulative GPA; JMC 301 or JMC 315 with C or better |
| JMC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; JMC 305 with C or better; minimum 2.50 GPA |
| JMC | 485 | Public Insight Network Bureau | Community engagement, story development, collaboration and entrepreneurship. Opportunity to build relationships with journalists in different markets and across media. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 or 315 with C or better; JMC 305 with C or better; minimum cumulative 2.50 GPA; Credit is allowed for only JMC 485 or JMC 494 (Public Insight Network) |
| JMC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| JMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisites: JMC student; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | Pre-requisites: JMC student; Minimum 2.25 GPA; Successful completion of English proficiency exam OR Graduate Mass Communication student |
| JMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-3 | | |
| JPN | 101 | First-Year Japanese I | Basic speaking, listening, reading, writing, computer skills, and culture. Hiragana, katakana, 75 kanji. For students without previous Japanese instruction. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| JPN | 102 | First-Year Japanese II | Continued development of JPN 101 skills. 99 additional kanji. Communication skills goal: ACTFL Guideline Novice-Mid to Novice-High. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 101 with a C or greater or in progress. Students may not take JPN 102 if they have received credit for JPN 201, 202, 309, 310, 311, 312, 313, 314 or 321 |
| JPN | 110 | Intensive Japanese I | First semester of the one-year intensive Japanese language sequence designed to train novice-level speakers to become competent intermediate speakers who can carry out conversation on familiar topics or handle straightforward situations. Emphasizes both oral and written communication through development of skills in listening, speaking, reading, writing and cultural awareness. Students manage a number of communicative tasks in social situations. Conversations are restricted to a few of the predictable topics necessary for survival; students express themselves in straightforward situations and on familiar topics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| JPN | 115 | Japanese Popular Culture: Anime, Manga, and Film | Examines different media of Japanese popular culture such as comics (manga), animation (anime) and film for evidence of how the Japanese express their self identity in Japanese society. By separating the media into themes such as technology and the future, war/apocalypse/disaster, violence in society, gender and sexuality, and human relations, understands the Japanese culture (and social consciousness) more intimately. Students view films, read scholarly articles on the subject matter, and actively participate in the course through written papers and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Credit is allowed for only JPN 115 or 194 (Japanese Popular Culture: Anime, Manga, and Film) |

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| JPN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| JPN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 201 | Second-Year Japanese I | Continued development in speaking, listening, reading, writing, culture, and computer skills. 74 additional kanji. Introduction to kanji dictionary. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 102 with C or better; Students with credit for JPN 202, 309, 310, 311, 312, 313, 314 or 321 may not enroll in JPN 201 |
| JPN | 202 | Second-Year Japanese II | Continued development of JPN 201 skills. 116 additional kanji. Communication skills goal: ACTFL Guideline Intermediate-Low to Intermediate-Mid. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: JPN 201 with C or better |
| JPN | 206 | Japanese Calligraphy | Introduces Japanese calligraphy using traditional implements, starting with basic brush strokes and stroke order for kanji and kana. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Pre-requisites: JPN 101 with C or better |
| JPN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 301 | Third-Year Japanese I | Development of reading skills, using authentic materials to comprehend structure, grammar, idioms, and culture. Expansion of kanji and vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: JPN 202 with C or better |
| JPN | 302 | Third-Year Japanese II | Continued development of reading skills, as in JPN 301. Reading proficiency goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 301 with C or better |
| JPN | 309 | Japanese Oral Communication I | Development of interpersonal, interpretive, and presentational oral/aural skills in familiar topics with sociolinguistic skills and understanding of Japanese culture. JPN 309 and 310 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 202 with C or better |
| JPN | 310 | Japanese Oral Communication II | Continued development of oral/aural skills, with increased emphasis on honorifics. Speaking proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 309 with C or better |
| JPN | 311 | Japanese Composition I | Learning structural guidelines for narrative writing, developing organization skills to support ideas. Writing proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 202 with C or better |
| JPN | 312 | Japanese Composition II | Continued development of writing skills, introducing research and creative writing. Writing proficiency goal: ACTFL Guideline Intermediate-high to Advanced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 311 with C or better |
| JPN | 315 | The Language of Japanese Popular Culture I: Gender and Onomatopoeia/Mimesis | Develops reading and listening skills using Japanese popular culture materials of various genres, including narratives, comics, anime, film and music. Introduces linguistic elements that are not found in regular language textbooks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre- or corequisite(s): JPN 202 with C or better if completed; Credit is allowed for only JPN 315 or JPN 394 (The Language of Japanese Popular Culture I) |
| JPN | 316 | The Language of Japanese Popular Culture II: Honorifics and Dialects | Understands Japanese popular culture materials such as anime, music, movies, manga and narratives through their target language of Japanese. Emphasized language areas are honorifics, formal expressions, dialects and slang and vulgar expressions that are tolerable in the classroom environment. Introduces elements of the history, geography and culture of Japan to further students' understanding of the materials. Students improve their receptive skills, i.e., listening and reading, by engaging with these materials, and through the technique of shadowing, also improve their pronunciation, intonation and grammatical accuracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre- or corequisite(s): JPN 301 with C or better if completed; Credit is allowed for only JPN 316 or JPN 394 (The Language of Japanese Popular Culture II) |
| JPN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 401 | Reading Modern Japanese Texts I | Readings in modern literary and expository texts. Focus varies from year to year. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: JPN 302 and SLC 202 with C+ or better |
| JPN | 414 | Introduction to Classical Japanese | Readings from various genres of pre-20th-century literature, with analysis of the structure of the classical language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 302 with C or better |
| JPN | 415 | Advanced Classical Japanese | Close readings of selected premodern texts, with focus on grammatical and stylistic features. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 414 with C or better |
| JPN | 445 | Readings in Modern Japanese Letters and Culture | Advanced study of selected facets of modern Japanese letters and culture, including literature, material and visual culture, film, and other media. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 202 with C or better. Credit is allowed for only JPN 445 or 535 |
| JPN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| JPN | 485 | Literary Translation: Theory and Practice | Introduces theories and practice of literary translation, with an emphasis on the translation of Japanese literary texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 421 with C or better. Credit is allowed for only JPN 485 or 585 |
| JPN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| JPN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JPN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |

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| JPN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| JPN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 535 | Advanced Readings | Readings in primary and secondary sources in history, art, religious studies, literature, or other fields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 445 or 535 |
| JPN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 585 | Advanced Problems of Translation | Theories and practice of translation; strategies for handling a variety of Japanese texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 485 or 585 |
| JPN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JST | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the biblical text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| JST | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| JST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Credit is allowed for only JST 210 or REL 210 |
| JST | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |

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| JST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| JST | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| JST | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| JST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 304 | Studies in European History | Specialized topics in European history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 304 or JST 304 |
| JST | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JST | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| JST | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| JST | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 317 |
| JST | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| JST | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristics, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only HEB 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| JST | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better. Credit is allowed for only HEB 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| JST | 373 | Women in Judaism | Studies the legal, social and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better and minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| JST | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| JST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST or REL 396 |
| JST | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| JST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| JST | 491 | History of Anti-Semitism | Anti-Semitism means hostility, negative perceptions, and persecution of Jews. Examines the evolution of anti-Semitism in the West from antiquity to modern times. Explains the history of anti-Semitism by looking at the interplay of religious, economic, cultural, and political factors. Special attention given to the origins of Christianity, the place of Judaism in Christian self-understanding, the power struggle between popes and emperors during the Middle Ages, the involvement of Jews in money lending, the alliance between the Jews and the secular princes, the rise of modern nationalism, and the place of racism in the politics of modern nation states. With a better understanding of the history of anti-Semitism, ponders the differences and similarities between premodern anti-Judaism and modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 230 (or REL 210) with C or better |
| JST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| JST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 495 | Judaism, Science and World Religions | Studies the correlation between science and religion as an interdisciplinary study from a historical perspective. Session topics fall into three distinct units. The first correlates the physical sciences with Western religious theology; the second explores the consequences of the life sciences on religious psychology; and the third examines the impact of the interconnection between sciences and religions in society. Each unit is studied through specific readings, film, lectures, and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 496 | Biblical Narratives: Literary Approaches | Presents different trends in synchronic approaches applied to the Bible such as narrative criticism, semiotics, reader-response criticism, and situates them both in the postmodern cultural context and in the history of biblical exegesis. Explores various literary devices in biblical narratives, such as repetition, type-scenes, characterization, the change of points of view, the use of metaphors. Studies each technique on particular biblical texts, literally translated into English, with a special emphasis on how these techniques guide the interpretation and create meaning. Questions the significance of literary approaches for religious or ideological texts, such as the Hebrew Bible. Also considers criticisms raised against these approaches, assesses their limits, and envisions their future. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108 with C or better; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |
| JST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JST | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JUS | 105 | Introduction to Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for freshmen and sophomores. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 105 or 305 |
| JUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must have less than or equal to 25 earned hours |
| JUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: Must have less than or equal to 25 hours |
| JUS | 200 | Topics in Concepts and Issues of Justice | Uses critical thinking skills to analyze and comprehend controversial social issues (e.g., abortion, affirmative action, capital punishment, the flat tax, and immigration). | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 207 | Homicide and Serial Killers | Explores the scholarship, research and rational analysis of the mass, spree and serial killer. It will examine some of the causes and underpinnings of these killers within the U.S. as well as the major theories and understandings of this phenomenon. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |

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| JUS | 214 | The Pursuit of Justice in the 21st Century | Introduces a wide variety of institutions and organizations--locally, nationally and internationally--that seek justice. Provides an understanding of the many ways justice is institutionalized in modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |
| JUS | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| JUS | 222 | Drugs and Justice | Provides an historical overview of the development and circulation of certain drugs; explores the more specific effects of drug use and abuse in everyday life; and examines the efforts by governments to both restrict/end and facilitate/expand the drug trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 200 (Drugs and Justice) or 222 |
| JUS | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |
| JUS | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| JUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| JUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 300 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| JUS | 301 | Research in Justice Studies | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Stresses methods for conducting research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 302 | Statistical Analysis for Justice Studies | Concepts and application of descriptive and inferential statistics, including linear regression, for justice studies research.. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | CS | Prerequisite(s): minimum 2.00 cumulative GPA; minimum 24 hours; ENG 102, 105 or 108 with C or better; MAT 117, 142, 170 or approved MA General Studies course |
| JUS | 303 | Justice Theory | Examines classic and contemporary philosophies and theories of justice, including legal, social, and criminal justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA |
| JUS | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present; looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |
| JUS | 305 | Principles of Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for juniors and seniors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 105 or 305 |
| JUS | 308 | Courts and Society | History and development of courts. Relationship between dispute resolution mechanisms and cultural/social structure/processes in which they are embedded. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 320 | Community and Social Justice | Discusses and analyzes definitions of community; impact of environment on behavior; promises of community organization for local empowerment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 321 | Wealth Distribution and Poverty | Examines wealth and income distribution in the United States and analyzes ideological and political forces producing an increasingly unequal society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 323 | Justice and the Development of the Welfare State | Provides a comprehensive overview of the development of social welfare and relevant issues pertaining to social justice. Introduces upper-division students to different ideas about the meaning of social welfare in the context of the development of the U.S. welfare state. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA; Credit is allowed for only JUS 325 or SGS 325 |

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| JUS | 326 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| JUS | 329 | Domestic Violence | Critical inquiry into the legal, historical, theoretical, comparative, and treatment literatures on domestic violence, application of contemporary justice and social change theories to research how society defines and organizes against domestic violence. May include consideration of intimate partner abuse, child abuse and neglect, and gender violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| JUS | 332 | Politics of Energy Policy and Justice | Examines the social and political dimensions that shape energy and environmental policy. Focuses primarily on the U.S. Introduces elements of regional or global policy where they influence or shape domestic politics and policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 335 | Organized Crime | Critical inquiry into organized crime and its illegal activities; analysis and application of contemporary theories; analysis of strategies for reducing the prevalence and power of organized crime in the U.S. and other nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| JUS | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| JUS | 350 | Immigration and Justice | Examines immigration policy, history of immigration, refugee issues, labor force participation, gender, family, children, social networks, and transnationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 352 | The Global Politics of Human Rights | Examines political forces that have shaped gradual construction of an international human rights regime and a universal culture of rights, including civil and political rights, as well as economic, social, and cultural rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| JUS | 360 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 365 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| JUS | 370 | Cultural Diversity and Justice | Analyzes how cultural diversity challenges and broadens conventional understanding of justice. Examines how cultural beliefs and practices come into conflicts with public law and policy. Assesses the U.S.'s performance on incorporating cultural diversity in its social institutions including education, media, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: 2.00 cumulative GPA; Pre/Co-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours |
| JUS | 374 | The Holocaust, Genocide, and Human Rights | Explores the psychological, social, historical, and political dimensions of the Holocaust and the phenomenon of genocide. Also examines the more recent international cases of genocide along with a discussion and analysis of the Universal Declaration of Human Rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |

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| JUS | 375 | Justice and the Mass Media | Analysis of the impact of mass media and popular culture on social justice issues, including criminal justice. Critical inquiry into portrayals of gender, race, culture and class in mass media and other forms of popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 382 | Justice and Pop Culture | Explores the connections between the production, reproduction, and consumption of popular culture and the resultant impact on issues of justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 385 | Justice and Everyday Life | Justice and injustice in everyday life and how small things can become legal issues. Role of language and interaction in social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 2.00 GPA; Minimum 24 hours |
| JUS | 405 | Economic Justice | Addresses economic issues and justice implications, including the interplay among economic conditions, race-ethnicity, class, and gender worldwide. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 408 | Comparative Development of the Welfare State | Embodies a multidisciplinary perspective on welfare issues and exposes students to different ideas about justice beyond the United States. Allows them to better understand how and why states organize and deliver justice in different ways. Exposes students to cross-national variation in how history, culture, politics, and economics have shaped the development and content of different types of welfare states. Engages theoretical perspectives from political sociology and political economy concerning the emergence and future fate of these welfare states. Analyzes comparative analysis of three distinctive types of welfare states; Liberal, Conservative, and Social Democratic Welfare States, with particular emphasis on their varying capacity to combine economic efficiency with social justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 410 | Punishment: Logic and Approach | Analyzes forms of punishment, how and why they have changed. Areas include philosophy, history, and social structure of punishment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 414 | Black Political Movements: Pan Africanism to Black Power | In-depth examination of the three defining 20th century political movements in Africa and the African Diaspora (USA, Europe, Latin America and the Caribbean)the Pan Africanist, the Civil Rights and the Black Power movements. A primary course objective is to synthesize a comprehensive understanding of Black/African politics and society from a Diasporan perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 9 upper-division hours; junior standing; Credit is allowed for only AFR 394 (Black Political Movements) or AFR 414 or JUS 414 |
| JUS | 415 | Gender and International Development | Examines the ways in which international development is gendered as well as women's rights as human rights in both national and international arenas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 420 | Women, Work, and Justice | Examines gender inequality in the workplace, including the nature of women's work, theoretical issues, and models for promoting gender justice at work. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 421 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |
| JUS | 422 | Women, Law, and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 422 or WST 422 |
| JUS | 424 | Ethics and Alternative Tourism | Cultural processes related to alternative tourism and their impact on both the tourist and local. Travel, tourism, globalization, development, human rights and the commodification of people and places. Topics include issues pertaining to Western tourism, commodification, race/class/gender and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 36 hours. Credit is allowed for only JUS 424 or JUS 494 (Sex, Drugs and Death) |
| JUS | 425 | Race, Gender, and Justice | Critically examines major theories, research findings, policies, and controversies concerning race, ethnicity, gender, and crime. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 427 | Identity and Justice | Theory of symbolic interaction which provides a vocabulary, observational methodology (i.e., dramaturgy) and a set of grounding concepts that allow students to explore identity in its everyday practices. Explores the transformation and emergence of identities in public discursive spaces and the political impact of identity as it is deployed (invoked) and interpreted (imputed) among interactants in the social world. Establishes the position that identity operates as a central constitutive function in the construction of meaning and, subsequently, our ideas and attitudes about justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only JUS 427 or JUS 494 (Identity & Justice) |
| JUS | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| JUS | 430 | Social Protest, Conflict, and Change | Analyzes historical and contemporary protest movements advocating equality based on race, gender, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| JUS | 432 | Racial Justice | Racial inequality remains a dominant theme in understanding social, legal, and economic justice in the U.S. today. Explores controversial topics surrounding race and justice. Emphasizes current legal, economic, political, and social conceptual frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 435 | Cinema and Justice | Tracks the conceptualizations of justice that have been and are currently conveyed in film, including but not limited to the relationship between crime and various notions of justice. Other depictions include social issues such as gender, race, or economics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 438 | Human Differences: Dilemmas of Justice | General examination of democracy and human differences that expands into in-depth investigations of (1) racial difference and identity politics; (2) gender and sexual difference in democracy; and (3) cultural difference and the multiculturalism debate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 440 | Prisons, Power and the Punishments of the Past | Examines the history and logics of a "U.S. Penal Democracy," tracing how prisons became the preferred and accepted choice for punishment. Traces how the practices, policies and rationalizations of punishment (physical, psychological and social) have been at the center of U.S. politics beginning in the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 36 hours. Credit is allowed for only JUS 440 or JUS 494 (Prisons, Power and the Punishments of History) |
| JUS | 444 | Environment and Justice | Explores issues of environment and justice. Topics include justice and environmental racism, future generations, nonhuman life, global/non-Western societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 445 | Surveillance and Society | Explore how surveillance technologies alter social life; the complex ways that they interact to produce security, fear, control, and/or vulnerability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 452 | Justice Issues in Israel and Palestine: The Political is Personal | Explores the justice issues related to the symbolic, historical, geographic, political, economic, religious, social and cultural meanings of Israel and Palestine. Focuses on how and why the "political" is felt so very personally in everyday life in Israel and Palestine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 456 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 36 hours. Credit is allowed for only JUS 456, SOS 456, JUS 394 (Human Rights & Sustainability), or JUS 497 (Seminar in Human Rights) |
| JUS | 460 | Feminism and Justice | Explores feminist thought and critiques traditional political theories. Examines issues of racism, sexuality, and the law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 463 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 465 | Death Penalty in the United States | Focuses on capital punishment in the United States; explores negotiation of law, politics, morality, public policy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 467 | Terrorism, War, and Justice | Examines the relationship among terrorism, war, and justice. Analyzes terrorism within the larger study of deviance and social control, comparative politics, hegemony, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 468 | Protest, Justice, Law and the Media | Examines research on protests, political deviance, trials/law and justice, and critiques some of the media representations of related ideas. Investigates global social movements, political protests and nascent political trials. Analyzes varied justifications for defining action as diversity, deviance or crime and the reasons for using criminal, civil or alternative (positive) sanctions (especially via indigenous peoples). Explores the encompassing meaning of a political trial. Many people throughout the world find everyday life to be a trial, especially those placed on the margins of globalization. Expands the research on media and trials that usually have been examined narrowly by legal institutions in North America and reinforced by hegemony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 2.00 GPA; minimum 36 hours; Credit is allowed for only JUS 468 or 494 (Protest, Justice and the Media) |
| JUS | 469 | Political Deviance and the Law | Examines the controversies created by political and deviant behavior, including a critical view of law as an agent of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 470 | Alternative Dispute Resolution | Critical examination of the tenets of alternative dispute resolution movement, exposure to the programs of ADR, including community and court based. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

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| JUS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Non-Justice Studies majors with minimum 56 hours and 2.50 GPA OR Prof/capstone undergrad or Justice Studies graduate; Credit is allowed for only REL 482, POS 473, or JUS 473 |
| JUS | 474 | Legislation of Morality | Addresses historical and contemporary issues related to social justice movements, law, and morality in a pluralistic society. Issues include AIDS, burial rights, homosexuality, poverty, prostitution, and racial discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 477 | Youth and Justice | Critical examination of youth-related justice issues, including economic justice, violence against youth, delinquency, and the juvenile justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 479 | Law and Disputing | Critical analysis of the controversies created by disputes, law, and other forms of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| JUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| JUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| JUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Social and Cultural Pedagogy MA student, Justice Studies MS or PHD student |
| JUS | 501 | Justice Theory | Theories and philosophies of social, economic, political, and criminal justice. Applies theories to contemporary justice issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 509 | Statistical Problems in Justice Research | Methodological problems of research design and statistical methods specific to justice studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 521 | Qualitative Data Analysis and Evaluation | Analyzes qualitative data, e.g., field notes, in-depth interview transcripts, document analysis, coding, and retrieval with a microcomputer; qualitative evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 542 | American Indian Justice | Provides a broad overview of American Indian and Alaskan Native issues of justice and injustice in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 550 | Gender, Race, and Economic Justice | Provides a critical social scientific perspective on economic issues particularly as they relate to gender, race, and class equality. Examines issues of economic inequalities as they are distributed along the lines of gender and race. Components converge to identify the social justice ramifications of economic policy and economic conditions. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 555 | Migration/Immigration and Justice | Explores the causes and consequences of immigration to the United States and the incorporation of immigrants into the American economy and society. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 560 | Women, Law, and Social Control | Gender issues in the exercise of formal and informal mechanisms of social control, including economic, social, legal factors, both violent and nonviolent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 570 | Juvenile Delinquency | Study of delinquency, including causation theories. Alternative definitions of delinquency, official statistics, and the critique and analysis of the interaction between social institutions and youth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 575 | Race, Gender, and the Law | Explores the law and social sciences literature on race, ethnicity, gender, and the legal order. Critically assesses the major contemporary theoretical and policy debates and controversies in the field from a variety of disciplinary and interdisciplinary lenses, setting these debates in their historical contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 588 | Justice and the Mass Media | Analyzes the nature and impact of mass media messages about justice concerns for social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 610 | Law and the Social Sciences | Analyzes the theoretical grounds underlying diverse studies of law and society; creation and administration of law; and jurisprudence and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 620 | Justice Research Methodology | Covers the epistemology of knowledge and method in justice research, history, and philosophy of social science and critical inquiry, as well as perspectives that link these concerns to research strategies. Explores the strengths and weaknesses of introduced methodologies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 500 with C or better |
| JUS | 630 | Data Analysis for Justice Research | Bivariate and multivariate techniques of data analysis and hypothesis testing for justice-related research and use of information and statistical programs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 509 with C or better |
| JUS | 633 | Community Research | Focuses on epistemology, methodology, and the production of knowledge about community and seeks to link theory, methodology, specific research strategies, and social criticism about the conduct of community research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 640 | Theoretical Perspectives on Justice | Analyzes philosophical perspectives of justice; linkages between social science theory and justice constructs; application of justice to social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 501 with C or better |
| JUS | 650 | Advanced Qualitative Data Analysis | Advanced qualitative data collection and analysis techniques, including ethnography, in-depth interviews, field notes, coding, transcribing, content analysis, textual analysis. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 656 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only JUS 656 or SOS 656 or JUS 691 (Human Rights & Sustainability) |
| JUS | 660 | Globalization and Economic Justice | Explores the political economy of globalization from a theoretical as well as practical standpoint. Sources used come from a variety of disciplines—sociology, political science, international relations, geography, and economics—all of which contribute unique theoretical and normative tools for analyzing the effect of global forces on economic justice. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student |
| JUS | 669 | Political Trials and Indigenous Justice | Focuses upon research on political trials, deviance, and conceptions of indigenous and contemporary justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| KIN | 101 | Introduction to Kinesiology | Introduces the disciplines and professions associated with kinesiology, including an overview of historical and philosophical foundations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 102 | Forager to Couch Potato: The Obesity & Diabetes Epidemics | Overview of factors leading to the global surge in obesity and type 2 diabetes; the historical, cultural, environmental, and anthropological factors impacting genotypes related to the development of obesity and diabetes; social forces leading to a sedentary lifestyle; and options for reengineering environmental and social institutions to increase physical activity. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 105 | Physical Education Activity | Beginning instruction in a wide variety of sports such as aerobics, aquatics, racquet sports, physical conditioning, and golf. 3 hours per week. Y grade only. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 110 | Research Analysis Laboratory | Introduces basic research areas in the discipline of kinesiology. Topics may include the following: developmental learning, exercise physiology, exercise psychology, exercise testing, metabolic physiology, motor control, motor learning, research journals and societies, research methods, research writing. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-2 | | Pre-requisite: Pre Sec Ed - Physical Ed, Exercise Sci/Phys Educ or Kinesiology major |
| KIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | Prerequisite: maximum 25 hours |
| KIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 205 | Physical Education Activity | Intermediate levels. Continuation of KIN 105. 3 hours per week. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 290 | Introduction to Evidence Based Practice | Introduces best practices for gathering, interpreting, analyzing, synthesizing and evaluating research within the discipline of kinesiology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better; KIN 101 with B or better; ECN 221, JUS 302, POS 401, PSY 230, QBA 221, SOC 390, 395 or STP 226 with C or better; Credit is allowed for only KIN 290 or 294 (Intro Evidence Based Practice) |
| KIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 310 | Collegiate Sports | Participation in men's or women's intercollegiate competition. May be repeated for 4 hours 1 per year. Y/E grade. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 334 | Functional Anatomy and Kinesiology | Muscles, bones, joints, and nerves and how they produce movement. Emphasizes muscle origins, insertions, actions, and innervations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 (ZOL 201) with C or better; BIO 202 with C or better |
| KIN | 335 | Biomechanics | Basic anatomical and mechanical principles applied to human movement. Emphasizes kinematic and kinetic concepts. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202) with C or better; One of the following courses: MAT 170, 210, 251, 270, 271, or 272 with C or better |
| KIN | 340 | Physiology of Exercise | Physiological mechanisms of acute responses and chronic adaptations to exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202) with C or better; one of the following courses: CHM 101, 113, 114, 115, 116, 117, or 118 with C or better |
| KIN | 345 | Motor and Developmental Learning | Principles of motor skill acquisition across the life span, focusing on the learner and the learning environment. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 101) with C or better; BIO 201 (ZOL 201) with C or better |
| KIN | 348 | Psychological Skills for Optimal Performance | Applies psychological techniques and their use to improve effectiveness and performance in sport and related areas. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | |
| KIN | 352 | Psychosocial Aspects of Physical Activity | Interrelationships between physical activity and psychosocial variables, including socialization, cultural values, aggression, and motivation. Includes the psychological benefits of physical activity and exercise adherence. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 100) with C or better |

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| KIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 412 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discussion of injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 with C or better; Credit is allowed for only KIN 412 or 512 |
| KIN | 413 | Qualitative Analysis in Sport Biomechanics | Develops systematic approach for detecting and correcting errors in human performance using anatomical and mechanical principles. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 (EPE 335) with C or better |
| KIN | 414 | Electromyographic Kinesiology | Muscular contributions to human movement, muscle mechanics, electrophysiological basis, and practical application of electromyography. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisites: KIN 335 (EPE 335 or PED 335) with C or better; KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 418 | Experimental Neuromechanics | Students experience different quantitative techniques to analyze human movement from a motor control and biomechanical perspective. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): KIN 290; KIN 335; KIN 345; Credit is allowed for only KIN 418 or KIN 494 (Experimental Neuromechanics) |
| KIN | 421 | Human Motor Control | Focuses on understanding how the human central nervous system controls, regulates, and learns movements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 422 | Motor Control in Special Populations | Discusses principles of motor control theories and related practical applications for certain special developmental populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 423 | Motor Control and Aging | Functional and behavioral changes to the motor control system as humans age, how specifically it impacts motor control and learning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 181; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437 or 537; Credit is allowed for only KIN 437 for KIN 494 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 440 | Exercise Biochemistry | Study of bioenergetics and metabolism of cellular (skeletal muscle, heart, and liver) organelles and proteins during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 440 or 532 |
| KIN | 441 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 441 or 531 |
| KIN | 442 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with C or better; Credit is allowed for only KIN 442 or 536 |
| KIN | 443 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better; Credit is allowed for only KIN 443 or 533 |
| KIN | 444 | Metabolic Adaptations to Exercise Training | Examines physiologic adaptations to exercise training as they relate to metabolism and tissue functions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 445 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with a C or better; Credit is allowed for only KIN 445 or 535 |
| KIN | 446 | Pediatric Obesity | Covers a variety of aspects related to pediatric obesity including the causes and consequences in terms of physiologic, genetic, psychosocial, environmental and economic. Also discusses potential interventions such as behavioral, pharmacologic, surgical and public health and policy. Evidenced-based course where research guides class lectures and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 315 or KIN 340; Credit is allowed for only EXW 412 or KIN 446 or EXW 494 (Pediatric Obesity) or KIN 494 (Pediatric Obesity) |
| KIN | 447 | ECG Interpretation | Using ECG data, this course comprehensively investigates cardiac arrhythmias and interactions with therapeutic drugs and exercise. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 with C or better; Credit is allowed for only KIN 447 or 547 (or 598 (ECG Interpretation)) |
| KIN | 450 | Biopsychosocial Perspectives on Physical Activity and Health | Uses a biopsychosocial perspective to examine the interrelationships on physical activity and health (physical and mental). | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 352 (EPE 352) with C or better |
| KIN | 452 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: KIN 352 (EPE 352 or PED 352) with C or better; Credit is allowed for only KIN 452 or 522 |
| KIN | 454 | Motivational Theory in Exercise and Health | Assesses motivational theories relevant to the field of exercise and health psychology. Evaluates research and utilizes the findings to create applied public service announcements targeted toward a specific health issue (e.g., exercise, nutrition, smoking) and a specific population. Assesses students on four group public service announcements and "mini exams" for each unit. Taught in class, online and in a hybrid format. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): KIN 352 with C or better. Credit is allowed for only KIN 454 or KIN 494 (Motivational Theory in Exercise & Health) |
| KIN | 460 | Theory of Strength Training | Research and theories on developing muscular strength; programs for developing muscular strength. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| KIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| KIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Minimum 25 hours |
| KIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | Pre-requisites: BS Kinesiology major; Senior standing |

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| KIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| KIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 512 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discusses injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 412 or 512 |
| KIN | 520 | Applied Sport Psychology | Psychological theories and techniques applied to a sport to enhance the performance and personal growth of athletes and coaches. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 448 or 520 |
| KIN | 522 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 452 or 522 |
| KIN | 530 | Exercise Physiology | Immediate and long-term adaptations to exercise with special reference to training and the role of exercise in cardiovascular health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 531 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 441 or 531 |
| KIN | 532 | Exercise Biochemistry | Understanding the basic biochemical principles and enzyme pathways involved in energy transduction during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 440 or 532 |
| KIN | 533 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 443 or 533 |
| KIN | 535 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 445 or 535 |
| KIN | 536 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 442 or 536 |
| KIN | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 494 (Comparative Biomechanics and Motor Control), 537 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 547 | ECG Interpretation | Comprehensive investigation of the heart rhythm disturbances that occur within the chambers and conducting tissue of the heart. Partitioned into three sections allowing the systematic review of arrhythmias that occur in the atria, AV junction and ventricles of the heart. The material is designed to maximize understanding by analyzing electrocardiogram rhythm strips to reinforce applying the theoretical component of the course. Also uses the application of these theories through laboratory experiences allowing hands-on experience with electrode placement and 12 lead ECG interpretations. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Clinical Exercise Physiology MS or Exercise and Wellness MS student; Credit is allowed for only KIN 447 or KIN 547 or KIN 598 (ECG Interpretation) |
| KIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| KIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 598 | Special Topics | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 621 | Motor Learning/Control | Discussion of contemporary research issues in motor learning and control. Includes behavioral and neurophysiological issues. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KOR | 101 | First-Year Korean I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills, including Han'gul. Lecture, recitation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| KOR | 102 | First-Year Korean II | Continuation of KOR 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisite: KOR 101 |
| KOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 201 | Second-Year Korean I | Continual development of communication skills. Increased emphasis on reading and writing, vocabulary building, and review of fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 102 |
| KOR | 202 | Second-Year Korean II | Continuation of KOR 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 201 |
| KOR | 250 | Korean Culture and Society | Surveys Korean culture and society, covering history, religious traditions, gender, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| KOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 313 | Third-Year Korean I | Continued development of ability to communicate orally and in writing. Exposure to a variety of Korean written styles. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 202 |
| KOR | 314 | Third-Year Korean II | Continuation of KOR 313. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 313 |
| KOR | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| KOR | 347 | Korean Film and Literature | Introduces aspects of Korean history, culture, and society through Korean film and literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| KOR | 350 | Women of Korea | Examines the changing role and status of women in modern Korea in relation to political and cultural changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | H | |
| KOR | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 353 |
| KOR | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity; Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 354 |
| KOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| KOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| KOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| KOR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAA | 345 | Professional Practice Seminar | Landscape architecture practice including contracts, project and office management, liability, licensing, and professional development. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Landscape Architecture student; Co-requisite: LDE 362 |
| LAA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 252 | Natural Systems | Increases awareness and understanding of the biotic and abiotic systems, processes and factors of our biosphere in order to facilitate sustainable landscape architectural design and applications. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Credit is allowed for only LAP 252 or LTC 294 (Natural Systems) |
| LAP | 354 | Plant Materials | Plants as landscape architectural elements. Emphasizes plant identification and the uses of particular plants in landscape architecture. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture major. Co-requisites: LAA 345; LDE 362; Credit is allowed for only LAP 345 or LTC 494 (Plant Materials) |
| LAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Landscape Architecture BSLA plan; Co-requisite: LDE 461 |
| LAP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| LAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| LAP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 585 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| LAP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LAS | 205 | Deep Roots: Latin America | Introduces the diversity of Latin-American traditions through its cultural production. The approach is interdisciplinary (art, architecture, literature, film, theater, business and anthropology). Studies the history and culture of Latin America and its concept of identity and nation through a variety of genres. Focuses on aspects that reveal the complexity of Latin America and in turn provides insights into Latin American culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 206 | Locating Latin America: Interdisciplinary Methods | Methodologies course designed to provide exposure to academic fields and research approaches that intersect in Latin American studies | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 330 | From the Inside: The Latin American Journey | Journeys through a wide variety of genres and critical scholarship in Spanish. Provides a broad exposure to different types of reading and writing. Because the Latin American Studies program is flexible, students must be able to engage with many different types of texts across disciplines. Covers Latin American cultural history from pre-Colombian to the post-modern by exploring different formats and genres around major central themes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 340 | Latin American Women Writers | In the 20th and 21st centuries, Latin America has seen a proliferation of literature published by women authors. While this explosion of the written word owes in part to changing socio-economic factors and the opening of the international markets, Latin American women's literary history is often ignored in the canon. Examines the concepts of feminism through a Mexican framework, starting from the point of view of Mexican women theorizing about their own. This is not a history of feminism, but it does aim to highlight certain fundamental texts and key concepts of Mexico's history from the position of women writers, including feminism's critique of social structures beyond the bounds of gender relations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 350 | The Construction of a Nation: Chile in the 20th/21st Century | Examines Chilean history, politics and cultural production through its historical development and explores a multiplicity of cultural issues. Develops knowledge and appreciation of cultural and visual production of Chile and Latin America as well as acquired skills for critically analyzing texts in their applicability to modern-day society. Considers the variety of cultural and artistic productions (novel, poetry, short story, film, music, pop culture, presidential speeches) as sources of social commentary in which observations of national identities are constructed. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Credit is allowed for only LAS 350, ENG 494 (Construction/Nation:Chile in the 20th/21st Cen) or SPA 494 (Construction/Nation:Chile in the 20th/21st Cen) |
| LAS | 351 | Citiescapes: Urban Mexican Literature and Culture | Examines major developments in contemporary Mexican literature. Begins at mid-20th century as the novel turns away from the rural novel of the Revolution, toward a more urban setting. Mexico City serves as a cultural and political center, and the novels mark social and political changes across different literary currents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 355 | Contemporary Mexican Cinema: Changing Cartographies | Examines major themes and auteurs in contemporary film as their work intersects with larger cultural phenomena, expanding students' cultural knowledge as well as critical communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 471 | Treaties and Cultural Production in Spain and the Americas | Emphasizes sociocultural values associated with national, transborder and transatlantic identities providing a panoramic view of treaties, agreements, constitutions and cultural production by Americans and Spaniards from 1812 to 2012 with particular focus on the themes of nations, borders, citizenship and identity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 480 | Current Trends in Theatre and New Media in Latin America and Spain | Overview of the transatlantic cultural interrelationships between Latin American and Spanish theatre and performance in the 20th and 21st centuries. Explores topics such as cyber-theatre, Internet theatre and multimedia theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 481 | Dictatorships and Dirty Wars: Latin American Cinema from Resistance to Reconciliation | Examines aspects of Latin American politics and culture of and through the optic of social unrest. Examines films focusing on the period(s) of recent Latin American history in which there have been social upheavals, dictatorships and state repression, "dirty wars"; understood as clandestine wars waged on the citizenry by the government, social movements from below. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s) with C or better: LAS 205, 206, 330. Credit is allowed for only LAS 481 or SPA 481 or ENG 494 (Dictatorships/Dirty Wars:Lat Am Cinema) or SPA 494 (Dictatorships/Dirty Wars:Lat Am Cinema) |
| LAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| LAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |

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| LAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| LAT | 101 | Elementary Latin | Basic Latin grammar with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| LAT | 102 | Elementary Latin | Continuation of LAT 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: LAT 101 |
| LAT | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| LAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| LAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 201 | Intermediate Latin I | Final semester of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 102 |
| LAT | 202 | Intermediate Latin II | Beginning reading of Latin authors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 201 |
| LAT | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| LAT | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| LAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 322 | Medieval Latin | Surveys Late Antique and medieval Latin authors and texts, both prose and poetry. Some review of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: LAT 201 with C or better |
| LAT | 360 | Greece and Rome at War | | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| LAT | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| LAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 421 | Roman Literature | Readings in the Latin masterpieces. Authors read change each year in accordance with needs of the class. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |
| LAT | 422 | Roman Literature | See LAT 421. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |
| LAT | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| LAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| LAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| LAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 105 | The Structure and Methodology of the American Legal System | What is law? What is the structure of the American legal system? What does it mean to understand law in the context of that system? How is this system effective and problematic and how does its evolution over time change our perceptions of and relationships with those who are part of it? Provides answers to these and other questions while simultaneously developing a working understanding of American law, its practicalities, and externalities. Takes the form of a comprehensive inquiry into the legal system, its origins, structures, applications, success, failure, and decision-making processes. In asking probing questions about the system and its nature, explores the values and philosophies that inform our American conception of the law and its role in society. | N | LEC | N | OPT | College of Law | College of Law Dean's Office | 3 | | |
| LAW | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | College of Law Dean's Office | 1-4 | | Pre-requisites: JD students may not enroll. |
| LAW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1 | | Pre-requisites: Freshman standing |
| LAW | 210 | Law, Culture and Community | Considers how law constructs meaning from the world around us. Explores not only what law is, but why law is, and where law shows up in American public and private life. Examines the roles of law in facilitating cooperation and resolving conflict with an interdisciplinary lens of history, philosophy, religious studies, political and legal theory. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 210 or 294 (Law, Culture & Community) |
| LAW | 215 | Business, Law, and Society | Examines the philosophical and legal framework of business—the basic concepts of business entities, contracts, accountability, and relationships with an emphasis on the social context in which these concepts operate. Emphasizes the concepts of law and ethics throughout the course. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Undergraduate student; Credit is allowed for only LAW 215 or 294 (Business, Law, and Society) |
| LAW | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 310 | The Global Legal Community | Introduces the building blocks of the developing "global legal community," global governance institutions, both public and private, international law and transnational legal regimes. Examines how dynamic area of law is influenced by, and influences the conduct of the international and domestic relations. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 310 or 394 (The Global Legal Community) |
| LAW | 315 | Foundations in American Business Law | Explores the foundations of American business law. Topics covered include: the structure and processes of the U.S. legal system, a comparison of transactional law and business litigation concepts and processes, and the role of regulation in the free market. Students read law cases and other legal texts such as legislation, professional and academic legal writing. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): minimum 45 hours |
| LAW | 316 | Introduction to Corporate Tax Law and Policy | Hands-on introduction to the basics of U.S. Federal and Arizona state corporate tax law. Explores the economic and social policy foundations of the tax codes. Students use the tax code to address various business scenarios they may face. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 316 or 394 (Intro Corporate Tax Law&Policy) |

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| LAW | 322 | Consumer Protection Law | Since the "Progressive Era" at the turn of the last Century, many new consumer protection agencies were created: The Food and Drug Administration, The Public Health Service, The Federal Trade Commission, Agencies to Control Narcotics, and fifty years later the Consumer Product Safety Commission, the Environmental Protection Agency and the Radiation Health programs, Nuclear Regulatory Commission. Focusing mostly on health products, lookd at these efforts and their effects on the products we use, the choices we make and the assurances we have as consumers that these products are well manufactured and deliver the goods. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 322 or 394 (Consumer Protection Law) |
| LAW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 480 | Business, Law and Society | What would a legal system that is pro-business look like? Explores the role law plays in American business. Considers what it means to have business relations generally governed by the rule of law, and specifically in the United States legal system. Draws on legal theory, political theory, and American legal history to guide us. Examines some of the legal tools of the trade from property law and contract law that are fundamental to the conduct of American business. Discovers that the development of legal doctrines promoting free enterprise are at times tempered by social justice concerns rooted in conceptions of equality and fairness. Considers how the current legal regulatory climate promoting corporate social responsibility impacts business decisionmaking. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): LAW 210, LAW 215 or 294 [Business, Law and Society]; junior or senior standing. Credit is allowed for only LAW 480 or LAW 494 (Business, Law and Society) |
| LAW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 515 | Contracts | Explores common law legal method and the structure of Article 2 of the U.C.C. in the context of issues of contract formation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 516 | Criminal Law | Substantive law of crimes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 517 | Torts | Legal protections of personality, property, and relational interests against physical, economic, and emotional harms. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 518 | Civil Procedure | Explores the structure of a lawsuit and techniques of alternative dispute resolution. Specific topics include commencement of suit, joinder of parties, discovery, pretrial motions, subject matter and personal jurisdiction, res judicata, collateral estoppel, and choice of law under the Erie doctrine. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 519 | Legal Method and Writing | Examines methods used to analyze legal problems. Reviews precedent statutory construction and basic res judicata problems. Use of basic legal writing formats. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 522 | Constitutional Law I | Role of courts in the federal system, distribution of powers between state and federal governments, and the role of procedure in litigation of constitutional questions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 523 | Property | Indicia of ownership, found property, estates in land, landlord tenant, nonpossessory interests in property, nuisance, land use planning, and transfers of interests in property. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 524 | Legal Advocacy | Continuation of LAW 519. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |
| LAW | 530 | Fundamentals of Contract Law | Explores the fundamental principles of contract law under the common-law and Uniform Commercial Code statutory provisions. Focuses on issues of contract formation and interpretation, defenses to enforcement, warranties and conditions, and remedies for breach of contract. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major; Credit is allowed for only LAW 530 or LAW 598, Fundamentals of Contract Law |
| LAW | 581 | U.S. Law and Legal Analysis | Introduces non-JD students to the U.S. legal system and to the types of legal reasoning used by U.S. lawyers and judges. Provides the necessary instruction to use legal reasoning in work, including reading and understanding cases and statutes and applying existing law to the issue presented. Extensive written legal analysis exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |
| LAW | 582 | Patent Drafting | Prepares students to draft patent applications on behalf of clients. Additionally, students learn the techniques and language necessary to reply to Offices Actions issued by the United States Patent and Trademark Office (USPTO). Provides significant drafting experience, requiring three separate writing submissions and revisions based on instructor feedback throughout the course. Students create work product examples that can be shared with potential employers and/or prospective clients. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major |

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| LAW | 585 | Comprehensive Patent Practice | Prepares students for the patent prosecution process, as administered by the United States Patent and Trademark Office (USPTO). Uses a "cradle to grave" approach beginning with the earliest steps taken when preparing to draft a patent application for a client and ending with post-decision options and activities available to those awarded with an issued patent or denied an issued patent. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 5 | | Prerequisite(s): Master of Legal Studies major |
| LAW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 596 | Professional Legal Writing | Teaches non-JD students how to organize a legal research project by analyzing the facts and identifying the issues involved, determining the research tools needed to correctly investigate the legal problem, and systematically using these tools to strengthen and support the desired legal argument. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |
| LAW | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 601 | Antitrust Law | Legislation and its implementation to prevent monopoly and business practices in restraint of trade, including restrictive agreements involving price-fixing, trade association activities, and resale price maintenance. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: College of Law student |
| LAW | 602 | Civil Procedure II | Focuses on the Rules of Civil Procedure and how lawyers use the Rules in litigating civil cases from initiation through the pre-trial stages. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | |
| LAW | 603 | Conflict of Laws | Problems arising when the operative facts of a case are connected with more than one state or nation. Choice of law, bases of jurisdiction, effect of foreign judgments, and underlying federal and constitutional issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 604 | Criminal Procedure | Nature of the criminal procedural system with special focus on constitutional protections for the accused. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: College of Law student |
| LAW | 605 | Evidence | Principles and practice governing the competency of witnesses and presentation of evidence, including the rules of exclusion and roles of lawyer, judge, and jury under the adversary system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 606 | Federal Income Taxation | Federal income tax in relation to concepts of income, property arrangement, business activity, and current tax problems, with focus on the process of tax legislation and administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 607 | Nanotechnology Law and Policy | Provides an overview of the legal and policy issues relating to nanotechnology, including risk management, national and international regulations, intellectual property, privacy issues, and liability issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 610 | Advanced Criminal Procedure | Topics in criminal procedure, with emphasis on legal constraints on grand jury investigations, police practices, pretrial release, preliminary hearings, prosecutorial discretion, and plea bargaining. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 611 | Estate and Gift Tax | Tax laws relating to transfer of wealth both at death and during lifetime, including federal estate tax, gift tax, and income taxation of estates and trusts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student, LAW 606 |
| LAW | 612 | Family Law | Legal and nonlegal problems that an individual may encounter because of a situation as a family member. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 613 | Federal Courts | Federal judicial system; relationship of federal and state law; jurisdiction of federal courts and their relation to state courts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 614 | International Contracts | Explores the laws applicable to international contractual relations, focusing heavily on the United Nations Convention on Contracts for the International Sale of Goods. One of several offerings in the field of International Business Transactions, touches on choice of law rules and a comparison of selected UCC with CISG provisions; a comparison of the contract law of selected foreign nations with the UCC; and the law of contracts in the United States. The casebook is heavily oriented toward a problem method of study. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 615 | Public International Law | Role of law in international disputes. Considers drafting and interpretation of treaties and multilateral conventions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 616 | Jurisprudence | Introduces legal philosophy, with readings on the nature of law and legal reasoning, the relationship between law and morality and equality and social justice. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |

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| LAW | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| LAW | 618 | Decedent's Estates | Substantive concepts involved in transmitting wealth, including interstate succession, wills and will substitutes, the modern trust as a family protective device, creation of future interests in a planned estate, social restrictions of a non-tax nature, and methods of devoting property to charitable purposes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 620 | Civil Rights Legislation | Coverage of the rights and remedies provided by federal civil rights legislation, principally, the key provisions of the Reconstruction Era Civil Rights Acts, portions of the employment discrimination legislation, and voting rights legislation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 621 | Sales | Advanced issues involving the formation and interpretation of sales and lease contracts. Focuses primarily on Articles 2 and 2A of the Uniform Commercial Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 622 | Secured Transactions | Secured transactions under Article 9 of the Uniform Commercial Code and other relevant sections. Overview of the creation, perfection, and priority effects of security interests. Financing of business enterprise and consumer credit. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 624 | Community Property | Property rights of husband and wife; the Arizona community property system; homestead. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-2 | | Pre-requisite: College of Law student |
| LAW | 625 | Constitutional Law II | Fundamental protection for person, property, political, and social rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 626 | Writing for Law Practice | Helps students attain an advanced level of writing proficiency by exposing them to a broad range of legal documents. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: Juris Doctor Candidate; Credit is allowed for only LAW 626 or 665 |
| LAW | 627 | Corporate Taxation | Problems in taxability of the corporation, corporate distributions, and corporate reorganizations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 628 | Creditor-Debtor Relations | Creditors' remedies in satisfaction of claims and debtors' protection and relief under bankruptcy, other laws. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 629 | Employment Law | Employment law topics including testing, privacy, OSHA, FLSA, benefits, worker's compensation, rights to compensation, workplace emotional injuries, termination, and sexual harassment. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 630 | Employment Discrimination | Focuses primarily on Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 631 | Environmental Law | Litigation, administrative law, and legislation relating to problems of environmental quality. Topics covered may include air and water pollution, toxic substances, pesticides, and radiation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 632 | Federal Indian Law I | Inquiry into legal problems special to American Indians and tribes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 633 | Law, Litigation, and Science | Fills a gap in the education of most lawyers, namely, how to effectively think about and use empirical evidence. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 635 | Juvenile Law | Special problems in the juvenile system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 636 | Land Use Regulation | Legal problems in the regulation and control of land development by state and local governments. Administration of zoning, subdivision, and other planning controls; issues of fairness and procedure in the utilization of such controls. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 637 | Lawyering Theory and Practice | Issues of competency and professionalism in the practice of law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 4 | | Pre-requisite: College of Law student |
| LAW | 638 | Professional Responsibility | Emphasizes the Model Rules and Model Code that govern the professional responsibility of lawyers and their interpretation and application. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 639 | Natural Resource Law | Examines the constitutional basis for federal land management and the different kinds of public lands management schemes (e.g., parks, forests, wildlife refuges), emphasizing acquisition of right to, and regulation of, the different uses of public lands and resources (e.g., mining, grazing, timber, wildlife habitat, recreation). | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 640 | Securities Regulation | Selected problems arising under the major statutes concerned with regulating the securities market. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 642 | White Collar Crime | Examines the ways in which white collar crime is prosecuted, principally in the federal system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 643 | Water Law | Acquisition of water rights; water use controls; interstate conflicts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 645 | Patent Law | In-depth examination of substantive patent law as it applies to the commercialization and enforcement of patent rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 646 | Copyright Law | Legal rights in original forms of human expression. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 647 | Mass Tort Litigation | Examines unique procedural and substantive issues that arise in mass tort litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 648 | International Intellectual Property | Considers patents, copyrights, and trademarks under international law and the major international treaties. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 649 | Scientific Evidence | Examines the use of scientists and scientific tests or studies in criminal and civil litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |

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| LAW | 650 | Health Law | Introduces health law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 651 | Public Health Law | Addresses the relationship between the state and the population's health. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 652 | Bioethics and the Law | Covers a range of issues relating primarily to human reproduction and life and death decisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 653 | Bankruptcy | Covers basic bankruptcy law and practices. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 654 | Business Organizations | Covers the primary forms of business organizations: partnerships, limited partnerships, limited liability companies, and corporations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 655 | Chapter 11 | Covers the law and practice of reorganizing business entities under Chapter 11 of the United States Bankruptcy Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 656 | Valuing Real Estate and Closely-Held Businesses | Focuses on the valuation of interests in real property and closely-held businesses. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 657 | Private Property Rights | Explores the conflict between property rights and the right of the government to acquire private property for public use. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 658 | Arizona Constitutional Law | Examines the basic provisions of the Arizona Constitution and the judicial decisions interpreting those provisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student; LAW 522; Pre/Co-requisite: LAW 625 |
| LAW | 660 | Advanced Estate Planning | Covers advanced estate planning and estate administration issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 661 | Constitutional Literacy | Academic complement to the Marshall-Brennan Constitutional Literacy Program where law students teach constitutional law to high school students. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 662 | Alternative Dispute Resolution and Employment Law | The use of alternative dispute resolution has been most extensive in the area of employment law. Mediation and arbitration are widely used not only in the collective bargaining setting, but also in virtually every aspect of the employment relationship. Offers a comprehensive review of the subject with special emphasis on the extensive body of law that has developed in regulating employer-imposed arbitration. Discussion of mediation includes use of simulations to enable the students to understand how mediation can effectively resolve employment disputes. Opportunities to observe real mediations of employment disputes. Experienced attorneys discuss the "real world" use of employment ADR from a plaintiff's and a defendant's perspective. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 664 | Intellectual Property | Surveys the laws conventionally grouped as intellectual property, with a focus on patents, copyrights, and trademarks. Explores the policy rationales for each body of law. Particularly relevant for two types of students: (a) those who are unsure they want to specialize in IP and want a general introduction, and (b) those who do not have room in the schedules to take all of the upper-level offerings here at ASU. Not appropriate for students who have already taken the upper-level courses in copyright, trademark, and patents; students who have taken these offerings may be withdrawn. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 665 | Fundamentals of Legal Drafting | Fundamental writing skills applicable to drafting normative legal documents. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 667 | FDA Regulation | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BMD 667 or LAW 667 |
| LAW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 697 | Visiting Student Program | | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LAW | 701 | Arbitration | Examines the Federal Arbitration Act and the Uniform Arbitration Act as it has been adopted in Arizona. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 702 | Alternative Dispute Resolution | Broad exposure to methods of settling disputes in our society such as mediation, arbitration/conciliation, and negotiation, including examination of the current litigation model. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 703 | Law, Science, and Technology | Legal mechanisms used in dealing with various issues raised by contemporary science and technology. Explores current legal responses to science and technology. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 704 | Federal Indian Law II | Surveys the federal legal doctrines surrounding Indian ownership and exploration of resources. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 705 | Media Law | Examines First Amendment principles and statutory and regulatory requirements with respect to the conventional print and broadcast media, as well as recent technologies such as cable. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 706 | Immigration Law | Explores political, economic, social, and legal issues concerning immigration. Specific topics covered include citizenship and naturalization, denaturalization, deportation, and refugee rights and asylum. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 707 | Elder Law | Looks at legal and policy questions related to aging individuals and an older society. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 709 | International Human Rights | International rules and procedures governing the protection of human rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |

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| LAW | 710 | Real Estate Tax Planning | Discusses topics, including but not limited to real estate investments as tax shelters, alternative acquisition finance devices, refinancing techniques, and nontaxable exchanges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 712 | Religion and the Constitution | In-depth study of the establishment and free exercise clauses of the First Amendment to the U.S. Constitution. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 713 | Tribal Law and Government | Analyzes particular problems in tribal law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 715 | Sports Law | Unique legal problems relating to professional sports, including their relationship to antitrust laws, the nature of player contracts, and associated tax problems. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 718 | Economic Development in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: Law major; Credit is allowed for only LAW 718 or PUP 718 |
| LAW | 719 | International Indigenous Rights | Examines the developments in recognizing indigenous rights in people's systems of international law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 720 | Indian Gaming Law | Surveys the law surrounding the Indian gaming industry. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 721 | Education and the Law | Current legal problems affecting institutions of higher education, faculty, students, and governing boards. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 723 | Cultural Resources Law | Focuses on the protection of Native American cultural resources and religions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 724 | Privacy | Traces the development of privacy law with special attention to contemporary challenges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 725 | Critical Race Theory | Focuses on the idea of "race" as a social/political construct and examines the impact of American law on the construction of race. Provide historical and legal background necessary to understand the significance of race within American law and policy. Evaluate a number of legal frameworks that address issues of race and ethnicity in various contexts (e.g. segregation laws, civil rights law, federal Indian law, international human rights law). Assesses various jurisprudential accounts evaluating the ethical and moral underpinnings of the law. Critical race theory is known as a jurisprudential framework that is often critical of standard liberal approaches. Evaluates the critiques of liberalism and the scholarship of both liberal and critical theorists. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 733 | Negotiation | Explores alternative models of negotiated dispute resolution, as well as the roles of lawyer and client in the negotiation process. Extensive use of simulation exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 734 | Products Liability | Traces the development of products liability law; analyzes the major issues currently confronting the courts in this area. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 735 | Teaching Assistant | Legal writing teaching assistants assist a writing professor with various tasks throughout the semester. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 736 | Advanced Legal Research Seminar | Focuses on a rigorous review of basic print and electronic resources and strategies for conducting legal research, federal/state. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 737 | Cults and Alternative Religions | Provides opportunity to study laws and policies governing cults. While the definition of a "cult" will be a topic of initial study in the seminar, it may be conceived of loosely as a group with a charismatic leader whose members are persuaded to relinquish their self-identities and material possessions in furtherance of the group's goals. In addition to analyzing the definition of a "cult," the first part of the seminar discusses the various types of cults, studying particular cults, and learning about cultic activities. The remainder covers domestic and foreign legal and policy issues generated by cults, including the legal rights of cultic organizations, anti-cult organizations, cult members, and cult members' families. Covers conventional religions that are conceptually similar to cults, to the degree that religious movements fall outside the mainstream. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 738 | Trial Advocacy | Confronts issues of trial advocacy through simulation of a variety of aspects of trial practice in a mock court setting. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 605 |
| LAW | 739 | Economics and the Law | Explores premises of the law and economics movements and their applications to property, contract, and tort law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 745 | The Supreme Court | Intensive examination of selected current decisions of the U.S. Supreme Court. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 768 | International Business Transactions | Introduction to U.S., foreign, and international law regulating cross-border business transactions and to the structure of cross-border business deals. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 515 and 654 |
| LAW | 770 | Law Journal | Academic credit for successful completion of editorial work by a member of the staff of Arizona State Law Journal. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 771 | Jurimetrics Journal | Academic credit for successful completion of editorial work by a member of the staff of the Jurimetrics Journal of Law, Science, and Technology. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 772 | Defender Clinic | Placement in the Public Defender Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 773 | Civil Justice Clinic | Placement in the Civil Practice Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |

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| LAW | 774 | Criminal Practice Clinic | Placement with various prosecutor offices in the Phoenix area and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student; LAW 605 |
| LAW | 775 | Mediation Clinic | Study of the mediation process and experience as mediators in cases pending before the justice courts and administrative agencies. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 776 | Indian Legal Clinic | Provides law students the opportunity to participate in cases dealing with native peoples and Indian issues. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 777 | Innovation Advancement Legal Clinic | Allows students to gain real-world experience in legal areas such as patentability of inventions, patent drafting, and technology valuation. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 778 | Immigration Law and Policy Clinic | Live-client clinic where students represent Latinos, particularly children, in immigration proceedings and the immigration courts. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 781 | Independent Study | With the approval of a faculty member, a student may research a legal subject of special interest and prepare a paper suitable for publication. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 782 | Independent Study | See LAW 781. | N | IND | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |
| LAW | 783 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 785 | Externship | Supervised, practical lawyering in an external placement proposed by the student or established by a sponsoring agency and approved by the Sandra Day O'Connor College of Law. In addition, an associated academic component is established by the student with a member of the faculty. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 795 | Cont Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | College of Law | Sandra Day O'Connor College of Law | 1 | | |
| LAW | 797 | Visiting Student Program | | N | LEC | N | Z3 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LDE | 361 | Landscape Architecture I | Site planning: analysis of natural and cultural features; site systems and implications for plan making and design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; ALA 226 with C or better; Co-requisites: LTC 343 |
| LDE | 362 | Landscape Architecture II | Site design: site-specific design of configured space by the creative development of form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 361 (or PLA 361) with C or better |
| LDE | 363 | Landscape Planting Design | Functional and aesthetic use of plants in arid-region landscape design. Explores design philosophies through planting design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Co-requisites: LTC 344, LDE 461 |
| LDE | 461 | Landscape Architecture III | Landscape ecological planning: collection and application of ecological data relevant to planning and design at landscape scale. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 362 with C or better; Co-requisites: LTC 344; LDE 363 |
| LDE | 462 | Landscape Architecture IV | Advanced landscape architecture: integrative capstone studio with multifaceted design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 461 with C or better; Co-requisite: LTC 446; LPH 411 |
| LDE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| LES | 305 | Business Law and Ethics for Managers | Legal theories, ethical issues, and regulatory climate affecting business policies and decisions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey student, or non-business student with minimum 2.5 ASU cum GPA and minimum 56 earned hours, or non-degree student with minimum 2.5 ASU cum GPA, or graduate student |
| LES | 306 | Business Law | Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letters of credit, and bank deposits and collections. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-Requisites: Student in Accountancy; Global Management student in Conditional or Professional Business status |
| LES | 380 | Consumer Perspective of Business Law | Role of law as it affects society. Uses case studies to present principles that govern business and consumers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Must have a minimum GPA of 2.00 ASU Cum GPA and a minimum total earned hours of 56, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| LES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree seeking student |
| LES | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student. Credit is allowed for only LES or REA 411 |
| LES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LES | 581 | Essentials of Law for Managers | Studies legal components of business decisions, multiple aspects of law affecting business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 582 | Ethical Issues for Managers | Studies ethical decisions; the role of business in society. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LES | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIA | 101 | Student Success in the College of Liberal Arts and Sciences | Introduces students to resources that help them succeed in the College of Liberal Arts and Sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Pre-requisite: Freshman standing; Credit is allowed for only LIA 101 or 194 (Intro Liberal Arts & Sciences) |
| LIA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| LIA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | |
| LIA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LIA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-14 | | |
| LIA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| LIA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | |
| LIA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 501 | Approaches to Research | Theories, methods and/or methodologies as well as qualitative and/or quantitative approaches to the specific discipline. Also serves as an introduction to the profession. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ENG 501 or LIN 501 |
| LIN | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| LIN | 511 | Phonetics and Phonology | Current trends in phonological theory and its basis in acoustic and articulatory phonetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 514 | Syntax | Analyzes syntactic structures using a generative theoretical model with a focus on English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 515 | American English | Development of the English language in America, including regional and social varieties, and its relationship to other immigrant and native languages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 516 | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Students who have credit for ENG 413, may not enroll in LIN 517 |
| LIN | 520 | Second-Language Acquisition Theories | Theories of second-language acquisition, including the linguistic, cognitive, and sociocultural aspects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 521 | Methods of Teaching English as a Second Language | Methods of teaching English as a second language, language teaching trends, practical applications, and the teaching of different skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 522 | Grammar for TESL | Surveys major grammatical structures in English and how they can be taught to ESL speakers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 523 | Language Testing and Assessment | Introduces the theory and practice of language test construction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LIN | 524 | Curriculum Design and Materials Development | Practical guide to curriculum and materials development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional practices and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| LIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 610 | Advanced Studies in Linguistics | Different topics such as morphology, semantics, typology, history of linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 614 | Advanced Studies in Syntax | Focuses on morphosyntactic feature checking, movement, phrase structure, and their crosslinguistic differences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 615 | Advanced Studies in Sociolinguistics | Language in its social setting, e.g., social variation among native speakers, sociolinguistics aspects of second-language acquisition, and language policy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 616 | Advanced Studies in Discourse Analysis | Advanced analysis of spoken and written discourse emphasizing different methodological and theoretical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 617 | Advanced Studies in Historical Linguistics | Overview of theories on language change, the history of languages, and of methods in historical linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 620 | Advanced Studies in Second-Language Acquisition | Selected topics in second-language acquisition, such as phonetics and phonology, morphology, syntax, and discourse. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing—an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ENG or LIN 625 |
| LIN | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to linguistics and applied linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 655 or LIN 655 |
| LIN | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 516 | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Students who have credit for ENG 413, many not enroll in LIN 517 |
| LIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate |
| LIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LNP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LNP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LNP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LNP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 310 | History of Landscape Architecture | Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Pre-requisites: Landscape architecture majors; ALA 100 or ALA 102; passed the degree milestone review, or non-majors with sophomore standing |
| LPH | 311 | 20th-Century Landscape Architecture | Explores concerns, projects, and movements in landscape architecture of late 20th-century understanding; social, ecological, regional, and historical influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites: Landscape architecture majors; ALA 100 or 102; passed the degree milestone review, or non-majors with junior standing |
| LPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 411 | Landscape Architecture Theory and Criticism | Critically analyzes landscape architecture theories and projects to evaluate validity of design and contribution to society. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisites: Landscape Architecture; LDE 461 and LPH 311 with C or better; Co-requisites: LDE 462 and LTC 446 |
| LPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 322 | Fundamentals of Ecology Laboratory | Investigational field course on fundamental concepts in ecology. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 320 or BIO 320 (with C or better if completed) |
| LSC | 347 | Fundamentals of Genetics | Science of genetics, gene flow, and genetic engineering in humans and other organisms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) and CHM 116 with C or better |
| LSC | 348 | Fundamentals of Genetics Laboratory | Investigational lab using modern molecular techniques to analyze various genetic phenomena. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; CHM 113 with C or better; CHM 116 with C or better; Pre or Co-requisites: LSC 347 (with C or better if completed) |
| LSC | 359 | Animal Physiology Laboratory | Investigative lab experience using animals (including humans) and models. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 358 or BIO 360 (with C or better if completed) |
| LSC | 362 | The Human Environment | Evolution of humans' physiological, ecological, and behavioral interaction with their environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| LSC | 363 | Genes, Race, Gender, and Society | Examines biological events and theories on race and gender and their interface with societal views. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188), BIO 182 (or BIO 187), BIO 340 (or LSC 347), LSC 353 and CHM 234 with C or better |
| LSC | 365 | The Human Organism | Analyzes human anatomy, physiology, and behavior in an ecological and evolutionary context with the methods of comparative biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| LSC | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| LSC | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375; Credit is allowed for only FOR or LSC 376 |
| LSC | 388 | Research Fundamentals for the Natural Sciences | Teaches research skills in the natural sciences. Topics covered include the basic research techniques of the study organism and system, experimental design, literature searches, statistical analysis and preparation of scientific papers and posters. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 2 | | Prerequisite(s): BIO 181; BIO 182; Credit is allowed for only LSC 388 or LSC 498 (Research Fundamentals for the Natural Sciences) |
| LSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 430 | Environmental and Human Toxicology | Lecture/fieldwork course investigating toxic substances in the environment and their effect on the health of organisms, including humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188), BIO 182 (or BIO 187), and CHM 116/115 with C or better |
| LSC | 432 | Fundamentals of Pharmacology | Aspects of pharmacology using an integrated approach to familiarize students with natural and synthetic therapeutic agents used in medicine. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: LSC 347 or BIO 340; LSC 353 or BIO 353; LSC 366, LSC 394 Topic: Modern Concepts in Biochemistry, BCH 361, or BCH 461; CHM 234 or CHM 231 |
| LSC | 434 | Marine Ecology | Examines ecological processes in oceans, seas, and estuaries that emphasizes species- and community-level phenomena. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; LSC 320 or BIO 320 with C or better |
| LSC | 447 | Molecular Genetics Laboratory | Investigative lab involving DNA isolation, PCR, gel electrophoresis, enzyme digestion and ligation, transformation, and hybridization analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | |
| LSC | 475 | Principles of Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394; Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| LSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| LSC | 486 | Peer Mentoring in the Life Sciences | Advanced students learn and apply mentoring skills in teaching labs. | N | SEM | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours |
| LSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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| LSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| LSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| LSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LAB | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LAB | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 540 | Theoretical Views of Learning in the Learning Sciences | Theoretical perspectives that inform learning scientists. Examines affordances and limitations of theories for designing productive learning environments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only EDP 540 or LSE 540 |
| LSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |
| LSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 683 | Fieldwork | | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |

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| LSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 343 | Landscape Construction I | Landscape constructions focusing on landform transformations. Topics include landform analysis, grading, and earthwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: LDE 361 |
| LTC | 344 | Landscape Construction II | Characteristics of materials and methods used in landscape architectural construction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 343 with C or better; Co-requisites: LDE 363 and 461 |
| LTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 446 | Landscape Construction III | Landscape construction focusing on low-technology, biotechnical, regional, and experimental techniques or systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 344 with a C or better; Co-requisites: LDE 462 and LPH 411 |
| LTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Pre-requisites: MAE Freshman student |
| MAE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 212 | Engineering Mechanics | Force systems, resultants, moments and equilibrium. Kinematics and kinetics of particles, systems of particles and rigid bodies. Energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical or Aerospace Engineering student; PHY 121 C or better; Pre- or Corequisite(s): MAT 274 or 275 (with C or better if completed) or Non-Mech/Aero student; PHY 121; Pre- or Corequisite(s): : MAT 274 or 275 |
| MAE | 213 | Solid Mechanics | Equilibrium, strain-displacement relations, and stress-strain-temperature relations. Applications to force transmission and deformations in axial, torsional, and bending of bars. Combined loadings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: CEE 210, CEE 211 or MAE 212 with C or better; MAT 274 (or 275) with C or better |
| MAE | 214 | Computer-Aided Engineering I | Introduces geometry and construction techniques in CAD, technical drawing conventions, generating drawings from CAD models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Pre-requisites: Mechanical & Aerospace Engineering student; MAE 212 (or ECE 212 or ECE 214) with C or better or Co-requisite: MAE 212 |

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| MAE | 215 | Introduction to Programming in MATLAB | Introduces basic topics and concepts of computer programming in MATLAB. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical and Aerospace engineering BSE student; MAT 265 (or 270); Credit is allowed for only MAE 215 or 294 (Introduction to Programming) |
| MAE | 240 | Thermofluids I | Introductory concepts in thermodynamics and fluid mechanics. Conservation of mass, momentum and energy. First and second laws of thermodynamics; application to nozzles, turbines, compressors, heat exchangers. Introduction to thermodynamic cycles. Bernoulli equation. Fluid statics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical and Aerospace Engineering majors: CHM 114 or CHM 116 with C or better; MAE 212 with C or better; MAT 274 or MAT 275 with C or better OR all other students: CEE 212 or CNE 212 or MAE 212 with C or better |
| MAE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 301 | Applied Experimental Statistics | Introduces key concepts in probability and statistics with engineering applications. Emphasizes modeling variation in observations, characterizing its distribution, and making inferences with regard to quality assurance and control. Develops critical skills such as fitting multivariate models, experimental design, and hypothesis testing, utilizing data from engineering projects, simulations, and laboratory experiences. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Aerospace or Mechanical Engineering BSE major; With C or better: CSE 100, CSE 110, or MAE 215; MAE 384; MAT 242, 342, or 343; MAT 274 or 275; MAT 267 or 272; Credit is allowed for only MAE 301 or MAE 394 (Applied Experimental Statistics) |
| MAE | 318 | System Dynamics and Control | Dynamics of physical systems, system modelling, feedback control, computer simulations and real-time experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 5 | | Prerequisite(s): Aerospace or Mechanical Engineering BSE major; EEE 202 with C or better; MAE 212 & 384 with C or better; MAT 267 or 272 with C or better; PHY 131 with C or better; Pre- or corequisite(s): MAE 301 or 394 (Applied Experimental Statistics) |
| MAE | 341 | Mechanism Analysis and Design | Positions, velocities, and accelerations of machine parts; cams, gears, flexible connectors, and rolling contact; introduces synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 212 with a C or better |
| MAE | 345 | Structures in a Space Environment | Space mission environment; mechanical behavior of materials and structures for space; analysis and design of space structures; finite element procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 214 and 384 with C or better; Pre- or corequisite(s): MAE 318 and 384 with C or better if completed |
| MAE | 351 | Manufacturing Processes | Production technique and equipment. Casting and molding, forming, machining, joining and assembly, computer-integrated manufacturing, rapid prototyping, and electronics manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MSE 250 with C or better; Credit is allowed for only IEE 360 or MAE 351 |
| MAE | 372 | Fluid Mechanics | Applies basic principles of fluid mechanics to problems in viscous and compressible flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 or MAE 360 with C or better; MAE 384 with C or better |
| MAE | 384 | Advanced Mathematical Methods for Engineers | Methods for numerical solutions to engineering problems. Nonlinear equations, quadrature, ordinary differential equations. Analytical and numerical solutions to partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | CS | Prerequisite(s): FSE undergraduate; With C or better: MAT 274 or 275; MAT 242 or 343 (or 342 if not MAE); MAE 215 (or MAE 294 Intro to Programming, CSE 100, or 110); Pre- or corequisite(s): MAT 267 or 272 with C or better; Credit for only CEE or MAE 384 |
| MAE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 400 | Engineering Profession | Impact of mechanical and aerospace engineering in a global and societal context; effects of and on globalization, environment, sustainability, economy, politics; engineering ethics and business practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Pre-requisites: Aerospace Engineering or Mechanical Engineering BSE majors; MAE 322 (or MAE 325 or MAE 394 Aerospace Structures and Materials) with C or better |
| MAE | 404 | Finite Elements in Engineering | Introduces ideas and methodology of finite element analysis. Applications to solid mechanics, heat transfer, fluid mechanics, and vibrations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 or ECE 313 with C or better; CEE 384 or MAE 384 or ECE 384 with C or better |
| MAE | 406 | Advanced CAE Simulation | Solution of advanced engineering problems with engineering software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: MAE 323; MAE 342 with C or better. Credit is allowed for only MAE 406 or MAE 546 |
| MAE | 417 | Control System Design | Tools and methods of control system design and compensation, including simulation, response optimization, frequency domain techniques, state variable feedback, and sensitivity analysis. Introduces nonlinear and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better |
| MAE | 436 | Combustion | Thermochemical and reaction rate processes; combustion of gaseous and condensed-phase fuels. Applications to propulsion and heating systems. Pollutant formation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 with C or better; Credit is allowed for only MAE 436 or MAE 536 |
| MAE | 455 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 250 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |
| MAE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| MAE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| MAE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MAE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite: graduate Engineering major except MS Electrical Engineering, MS Electrical Engineering (AME), MSE Electrical Engineering, PhD Electrical Engineering, or PhD Electrical Engineering (AME). Credit is allowed for only MAE 501 or MSE 501 |
| MAE | 502 | Partial Differential Equations in Engineering | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; credit is allowed for only MSE 502 or MAE 502 |
| MAE | 504 | Experimental Methods for Thermal and Fluid Processes | Theory of analog and digital signal analysis as applied to fluid and thermal measurements; optical diagnostics and micro sensors for measuring fluid velocity, pressure and temperature in unsteady flows; particle image velocimetry and thermal anemometry. Experimental methods are applied in a weekly laboratory. Students should have familiarity with Matlab or some programming language and have completed an intermediate level course in fluid dynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Graduate Engineering major |
| MAE | 505 | Perturbation Methods | Nonlinear oscillations, strained coordinates, renormalization, multiple scales, boundary layers, matched asymptotic expansions, turning point problems, and WKBJ method. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students; Credit is allowed for only APM 575 or MAE 505 |
| MAE | 506 | Advanced System Modeling, Dynamics, and Control | Lumped-parameter modeling of physical systems with examples. State variable representations and dynamic response. Introduces modern control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Pre- or corequisite(s): APM 505 or MAE 501 |
| MAE | 507 | Fundamentals of Control and Optimization | Optimal control of continuous-time dynamic systems. Linear systems and signal spaces, robust and LQR optimal control, optimization methods and LMIs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; MAE 506 with C or better |
| MAE | 508 | Digital Control: Design and Implementation | Analysis and design of control systems in which the digital computer plays a major role. Review of continuous control and introduction to the key effects of sampling. Elements of discrete system analysis; z-transform; sampled-data systems; sampling theorem and combined discrete and continuous system and the phenomenon of aliasing. Deterministic design methods for digital control systems (root-locus, frequency response, pole placement and Kalman filters), followed by nonlinear control and system identification. Emphasizes digital control implementation topics and a case study on robot control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only MAE 508 or MAE 598 (Digital Control: Design and Implementation) |
| MAE | 510 | Dynamics and Vibrations | Lagrange's and Hamilton's equations, rigid body dynamics, gyroscopic motion, and small oscillation theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students |
| MAE | 512 | Random Vibrations | Reviews probability theory, random processes, stationarity, power spectrum, white noise process, random response of single and multiple DOF systems, and Markov processes simulation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2-3 | | Pre-requisite: Graduate Engineering major |
| MAE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MAE | 515 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems. exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 510 with C or better; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| MAE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Fulton Engineering Graduate students; Credit is allowed for only CHE 518, EEE 518, MSE 475, MSE 518 or MAE 518 |
| MAE | 520 | Stress Analysis | Introduces tensors: kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 521 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 501 with C or better; CEE 526 or MAE 527 with a C or better |
| MAE | 523 | Fracture Mechanics | Linear elastic fracture mechanics. Nonlinear problems. Fatigue fracture. Experimental methods in fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; MAE 520 or MAE 598 (Continuum Mechanics) with C or better |
| MAE | 524 | Theory of Elasticity | Elastic behavior in two and three dimensions. Airy stress functions and displacement potentials. Elements of fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 520 with C or better |

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| MAE | 525 | Mechanics of Smart Materials and Structures | Modeling and analysis of smart materials and adaptive structures. Application areas include vibration and shape control and damage detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 510 with C or better |
| MAE | 527 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 501 with C or better |
| MAE | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| MAE | 536 | Combustion | Thermodynamics; chemical kinetics of combustion. Explosion and ignition theories. Reactive gas dynamics. Structure, propagation, and stability of flames. Experimental methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student. Credit is allowed for only MAE 436 or 536 |
| MAE | 540 | Advanced Product Design Methodology | Surveys research in engineering design process, artifact and design, knowledge, formal and informal logic, heuristic and numerical searches, theory of structure and complexity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical or Aerospace Engineering graduate student |
| MAE | 541 | CADTools for Engineers | Elements of computer techniques required to develop CAD software. Data structures, including lists, trees, and graphs. Computer graphics, including 2- and 3-D algorithms and user interface techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 542 | Design Geometry and Kinematics | Selected topics in geometry related to current potential applications in CAD/CAM, design theory, kinematics, and robotics. Euclidean isometrics, transformations; 4-D geometry; screw theory and its applications to robotics and assemblies. Differential geometry; curvature and torsional properties of curves and surfaces. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical and Aerospace Engineering graduate student; Credit is allowed for only MAE 542 or 598 (Design Geometry & Kinematics) |
| MAE | 544 | Mechanical Design and Failure Prevention | Modes of mechanical failure; applies principles of elasticity and plasticity in multiaxial state of stress to design synthesis; failure theories; fatigue; creep; impact. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 546 | Advanced CAE Simulation | Solution of advanced engineering problems with analysis software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MAE 406 or 546 |
| MAE | 547 | Modeling and Control of Robots | Homogeneous transformations, workspace, forward and inverse kinematics, differential kinematics, statics and dynamics, motion planning, motion and force control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Pre- or corequisite(s): APM 505 or MAE 501 |
| MAE | 557 | Mechanics of Composite Materials | Analysis, design, and applications of laminated and chopped fiber reinforced composites. Micro- and macromechanical analysis of elastic constants, failure, and environmental degradation. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; MAE 520 or MAE 598 (Continuum Mechanics) |
| MAE | 561 | Computational Fluid Dynamics | Finite-difference and finite-volume techniques for solving the subsonic, transonic, and supersonic flow equations. Method of characteristics. Numerical grid-generation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; Credit is allowed for only AEE 471 or MAE 471, 561 |
| MAE | 564 | Advanced Aerodynamics | Perturbation method. Linearized subsonic and supersonic flows. Thin wing/slender body theories. Lifting surface theory. Panel method computation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 566 | Rotary-Wing Aerodynamics | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE 466 or 566 |
| MAE | 570 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics; property relationships, power and refrigeration cycles, and reactive systems. A basic knowledge of thermodynamics is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only MAE 482, 570 or 598 (Thermodynamics), or MEE 482 |
| MAE | 571 | Fluid Mechanics | Basic kinematic, dynamic, and thermodynamic equations of the fluid continuum and their application to basic fluid models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 573 | Advanced Fluid Mechanics | Mechanics of fluids flows where either the effects of inertia or viscosity are significant. Exact and approximate solutions of the Navier-Stokes equations, laminar flow and flow at low and high Reynolds numbers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 575 | Turbulence | Homogeneous, isotropic, and wall turbulence. Experimental results. Introduces turbulent-flow calculations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 577 | Advanced Turbulence | Reynolds equations and their closure. Modeling of simple and complex turbulent flows, calculations of internal and external flows, and application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 578 | Geophysical and Environmental Fluid Dynamics | Dynamics of large-scale flows under the influence of stratification and earth rotation. Thermally and mechanically driven flows in turbulent boundary layer. Waves and instability of geophysical flows. Global-scale circulation. Applications to environmental prediction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 581 | Advanced Thermodynamics | Basic concepts and laws of classical equilibrium thermodynamics; applications to engineering systems; introduction and applications of statistical mechanics and kinetic theory; Boltzmann integro-differential equation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |

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| MAE | 585 | Solar Thermal Engineering | Solar energy availability, flat-plate and concentrating solar thermal collectors, solar heating and cooling, concentrating solar power (CSP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering student; credit is allowed for only MAE 585 or 598 (Solar Thermal Engineering) |
| MAE | 586 | Advanced Heat Transfer | Basic concepts and governing equations. Analysis of laminar and turbulent heat transfer for internal and external flows. Natural and mixed convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 587 | Radiation Heat Transfer | Advanced concepts and solution methodologies for radiation heat transfer, including exchange of thermal radiation between surfaces, radiation in absorbing, emitting, and scattering media and radiation combined with conduction and convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisites: Graduate Engineering major; Credit is allowed for only MAE 588 or SEC 588 |
| MAE | 589 | Heat Transfer | Basic concepts; physical and mathematical models for heat and mass transfer. Applications to conductive, convective, radiative, and combined mode heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MAE 494 topic (Heat and Mass Transfer) or 589 |
| MAE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): graduate MAE major |
| MAE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): graduate Engineering student |
| MAE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): graduate Engineering student |
| MAE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 501 | Methods for Interdisciplinary Inquiry | Critical survey of current models of inquiry, tools, processes, and methods in different fields. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |

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| MAS | 502 | Perspectives in Interdisciplinary Studies | Introduces interdisciplinarity through explorations of epistemological and rhetorical practices that bridge traditional disciplines. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 505 | Theories of Change, Culture, and Mind | Introduces graduate-level interdisciplinary study of key thinkers, movements, theories, and paradigms in 20th-century thought. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 510 | Science and Religion: Cosmologies and Worldviews | Examines science and religion, stressing modern scientific findings and philosophical and historical debates and dialogues. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Credit is allowed for only IAS 430 or MAS 510 |
| MAS | 513 | Sociology of Everyday Life | Examines institutional ethnography, a way of exploring the particular and generalized social relations that shape people's everyday experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 550 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary post/secular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-9 | | Prerequisite: Graduate (degree or nondegree) student. Credit is allowed for only MAS, PHI 550 or REL 585 |
| MAS | 573 | Art and Politics | Explores issues and relationships between the arts and politics through historical examples, significant artists and works, key thinkers, and theoretical approaches. Considers topics such as: the arts and ideology, art and the politics of representation, propaganda, censorship, state-supported art, human rights, revolution and war, cultural change, and political aesthetics. Emphasizes interdisciplinary arts and period study, including the arts and The Russian Revolution, the art in the Weimar Republic and Nazi Germany, and, generally, the arts, art and social movements (e.g., U.S. Civil Rights era, Eastern Europe's solidarity movement and Velvet Revolutions), as well as the arts and politics in selected contemporary contexts (e.g., China, the Middle East). | N | LEC | N | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 585 | Capstone Course | Assists students in preparing their capstone project, which represents the culmination of their study for the MA in Interdisciplinary Studies. | N | RSC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-4 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Mathematics Placement Test |

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| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | College of Letters & Sciences | College of Letters and Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 0-5 | | |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 251 | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 265 | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher. Credit is allowed for only MAT 265 or MAT 270 |
| MAT | 266 | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 267 | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 274 | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Mathematics Placement Test |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194; EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194; EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 171 | Precalculus: Science, Technology, Engineering and Mathematics (STEM) | Robust treatment of advanced algebraic skills and trigonometry that are vital in calculus. Algebra topics include functions, compositions, inverses, transformations, complex numbers, roots of polynomial functions, rational functions, exponential and logarithmic functions and their properties. Trigonometry is approached via the unit circle as well as the right triangle. Topics include the trigonometric functions, their graphs and identities, inverse trigonometry, the laws of sine and cosine, vectors and the dot product with an application toward work, and polar coordinates and roots of complex numbers (deMoivre's theorem). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Pre-requisites: MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-5 | | |
| MAT | 207 | Algebra and Geometry in the High School | Provides a conceptually rigorous treatment of the central ideas of algebra and geometry in high school. Explores and develops familiar mathematical content from a very different perspective. Focuses squarely on creating meaning for concepts and on building coherence of meaning across concepts and various representations of them. As such, course activities and assessments (class/lab activities, homework assignments, and exams) reflect these expectations, focusing on both doing high school mathematics with meaning and on expressing and communicating that meaning accurately and coherently in verbal and written form. Prior to enrolling in this course, students should have experience with algebra/geometry to at least the high school level. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Co-requisite: MTE 210 |
| MAT | 208 | Discrete Mathematics for Secondary Teachers | Potential secondary teachers of mathematics should master the Math Standards proposed by the National Council of Teachers of Mathematics for college-intending students. Focuses on those aspects of these standards that apply to discrete mathematics with particular emphasis on: mathematical problem solving, mathematics as communication, mathematical reasoning, and discrete mathematics. Taking a broader view, introduces mathematics as a discipline that uses known methods to discover and verify new conclusions through the study of discrete mathematics. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 242 | Elementary Linear Algebra | Introduces matrices, systems of linear equations, determinants, vector spaces, linear transformations, and eigenvalues. Emphasizes development of computational skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 2 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |

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|---------|-------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 251 | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 265 | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher. Credit is allowed for only MAT 265 or MAT 270 |
| MAT | 266 | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 267 | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 271 | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 272 | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | 274 | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 300 | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | 310 | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | 340 | Theory of Interest | Compound interest, discount rates, annuities, present values, depreciation, and bond valuations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, 251, 265 or 270 with C or better; Credit is allowed for only ACT 310 or MAT 340 |
| MAT | 342 | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 351 | Mathematical Methods for Genetic Analysis | Discrete mathematics, probability, statistics, and associated computer packages. Applications to genomics, bioinformatics, forensics, and DNA/protein sequence patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 270 (or MAT 251 or 265) with C or better |
| MAT | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 119, 210, 243, 251, 265, 270 or STP 220, 231 or 226 with C or better; Credit is allowed for only BIO 355, CPI 480, MAT 355 or MBB 355 |
| MAT | 362 | Advanced Mathematics for Engineers and Scientists | Vector analysis, Fourier analysis, and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 274 (or 275) with C or better |
| MAT | 370 | Intermediate Calculus | Theory behind basic 1-variable calculus: continuity, derivative, Riemann integral, sequences, and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 300 (or 243) with C or better; Credit is allowed for only MAT 371 (with C or better) or MAT 370 |
| MAT | 371 | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | 372 | Advanced Calculus II | Open, closed, compact sets in R^n continuity, differentiation, partial differentiation, integration in R^n Inverse/implicit function theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 371 with C or better; Pre/Co-requisite: MAT 342 or 343 (with C or better if completed); Credit is allowed for only MAT 372 or MAT 460 |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 410 | Introduction to General Topology | Topological spaces, metric spaces, compactness, connectedness, and product spaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300 with C or better |

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|---------|-------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 415 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Pólya theory and combinatorial structures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 415 or 512 |
| MAT | 416 | Introduction to Graph Theory | Trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 416 or 513 |
| MAT | 419 | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 420 | Scientific Computing | Surveys and applies programming languages, libraries, and scientific visualization tools. Programming assignments emphasize software development skills. Completion of advanced calculus recommended prior to this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 205; MAT 274 (or MAT 275), 342 (or MAT 343) |
| MAT | 421 | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |
| MAT | 423 | Numerical Analysis I | Solution of systems of linear and nonlinear equations, optimization, eigenvalues, round-off error, and floating point arithmetic. Fluency in computer programming is required for enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 342 (or 343) with C or better |
| MAT | 425 | Numerical Analysis II | Analysis of and algorithms for numerical interpolation, integration, and differentiation. Numerical solution of ordinary and partial differential equations, introductory level. Applications. Fluency in computer programming is required for success in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 (or 275) with C or better; MAT 371 recommended |
| MAT | 440 | Group Theory | Covers basic group theory. Students learn about the concept of a "group," related structures, their underlying theory and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 441 | Ring Theory | Covers basic ring theory. Students learn about the concept of a "ring," related structures, their underlying theory, and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 442 | Advanced Linear Algebra | Fundamentals of linear algebra, dual spaces, invariant subspaces, canonical forms, bilinear and quadratic forms, and multilinear algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343 |
| MAT | 443 | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | 444 | Intermediate Abstract Algebra | Basic theory of groups, rings, and fields, including an introduction to Galois theory. Appropriate as preparation for MAT 543. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 442 or 443 with C or better |
| MAT | 445 | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | 447 | Cryptography I | Block ciphers, stream ciphers, congruence arithmetic, information theory, public key cryptosystems, key exchange, electronic signatures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 100 (or CSE 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 448 | Cryptography II | Mathematical underpinnings of contemporary cryptosystems, electronic signatures, key exchange, primality testing and factorization algorithms. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 447. Credit is allowed for only MAT 448 or MAT 494. Cryptography II |
| MAT | 451 | Mathematical Modeling | Detailed study of 1 or more mathematical models that occur in the physical or biological sciences. May be repeated for credit with instructor approval. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 452 | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions; strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |
| MAT | 460 | Vector Calculus | Vectors, curvilinear coordinates, Jacobians, implicit function theorem, line and surface integrals, Green's, Stokes', and divergence theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended; Credit is allowed for only MAT 372 or 460 |
| MAT | 461 | Applied Complex Analysis | Analytic functions, complex integration, Taylor and Laurent series, residue theorem, conformal mapping, and harmonic functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 462 | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 472 | Intermediate Real Analysis I | Introduces analysis in metric spaces with emphasis on the real line. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 371 with C or better |
| MAT | 473 | Intermediate Real Analysis II | Analysis in \mathbb{R}^n : implicit function theorem, introduction to manifolds, Lebesgue integration, change of variables formula, convergence theorems for integrals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 472 with C or better |
| MAT | 475 | Differential Equations | Linear and nonlinear ordinary differential equations, asymptotic behavior of solutions, stability, existence and uniqueness, limit sets, Poincaré-Bendixson theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274 or 275 with C or better; MAT 370 or 371 with C or better |
| MAT | 476 | Partial Differential Equations | First-order quasilinear, second-order linear (wave, Laplace, heat). Characteristics, harmonic functions, maximum principles, Fourier series, separation of variables. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274, 275 or 475 with C or better; MAT 370 or 371 with C or better |
| MAT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): Minimum 45 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MAT | 485 | History of Mathematics | Topics from the history of the origin and development of mathematical ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 495 | Supervised research in mathematical sciences | Supervised research in mathematical sciences. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or MAT 495 |
| MAT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| MAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MAT | 512 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Polya theory and combinatorial structures. Same topics as MAT 415; mastery at much higher level required. Students with MAT 415 (even as undergraduates) may not enroll. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only MAT 415 or 512 |
| MAT | 513 | Introduction to Graph Theory | Rigorous introduction to graph theory. High-level mastery in topics such as trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MAT 416 or 513 |
| MAT | 514 | Enumerative Combinatorics I | First semester of a systematic development of enumerative combinatorics, including elementary counting techniques, sieve methods, and partially ordered sets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 515 | Enumerative Combinatorics II | Second semester of a systematic development of enumerative combinatorics, including lattices, exponential structures, symmetric functions, and selected special topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 516 | Graph Theory I | First semester of a systematic development of graph theory, including matchings, connectivity, arboricity, planarity, coloring, network flows. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 517 | Graph Theory II | Second semester of a systematic development of graph theory, including dense and sparse graphs, Ramsey theory, hamiltonicity, random graphs, minors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 541 | "p"-Adic Numbers | Introduces "p"-Adic numbers and analysis. Topics include valuations, completions of number fields, extensions of the field of "p"-adic numbers and "p"-adic analysis. Students should have previously taken courses in analysis and algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 542 | Elliptic Curves | Geometry and arithmetic of elliptic curves, points of finite order, the group of rational points, curves over finite fields, complex multiplication. Students should have previously taken a senior-level course in abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 543 | Abstract Algebra I | Groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 544 | Abstract Algebra II | Continuation of groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 543 |
| MAT | 545 | Abstract Algebra III | Covers modules, Galois theory, and preparation for advanced study in algebraic parts of mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 547 | Algebraic Number Theory | Algebraic properties of number fields and their completions. Topics include rings of integers, ramification, finiteness of the class group, and Dirichlet's unit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 561 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ABS, BIO 560 or MAT 561 |
| MAT | 570 | Real Analysis I | Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 571 | Real Analysis II | Continuation of Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 570 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MAT | 572 | Complex Analysis I | Analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 573 | Complex Analysis II | Continuation of analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 572 |
| MAT | 578 | Functional Analysis I | Locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 579 | Functional Analysis II | Continuation of locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 578 |
| MAT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: Mathematics Placement Test |
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |

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| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 (or MAT 170, 210 or 270) with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher. Credit is allowed for only MAT 170 or 171 |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-5 | | |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 271 | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 272 | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 300 | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | 310 | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | 342 | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 350 | Techniques and Applications of Applied Mathematics | Mathematical techniques and applications representative of the range of applied mathematics used in operations research, biology, economics, finance, and sociology. In depth exploration of these techniques in detail by focusing on selected applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or MAT 275; MAT 342 or MAT 343; Co-requisite: STP 420 |
| MAT | 371 | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |
| MAT | 419 | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 421 | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |

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| MAT | 429 | Optimization | A variety of optimization models and their applications to management, economics, engineering, and science. Topics include linear programming, integer programming, nonlinear programming, and stochastic programming. Stresses formulation and modeling as well as numerous applications and solving algorithms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 with C or better; MAT 350 or 419 with C or better |
| MAT | 443 | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | 445 | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | 450 | Mathematical Models in Biology | Introduces mathematical models in biological systems. Applications range from the cellular level to systems level and may include applications from areas such as physiology, ecology, epidemiology, population biology, computational and systems biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 (or 342) with C or better; MAT 275 (or 274) with C or better |
| MAT | 452 | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions; strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |
| MAT | 462 | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): Minimum 45 hours |
| MAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| MAT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MBB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisites: MBB 347 or BIO 340 with a C or better; Credit is allowed for only BIO 343 or MBB 343 |
| MBB | 347 | Molecular Genetics: From Genes to Proteins | Emphasizes molecular and cell biology and gene technology, both at the basic and applied research levels, in the growing areas of biotechnology and the molecular biosciences, focuses on molecular processes that allow genetic information to be expressed and regulated and by introducing applications to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 282 (or BIO 181 and 182); CHM 116. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| MBB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MBB 247 or BIO 340 with C or better; Credit is allowed for only MBB or PLB 350 |
| MBB | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 or STP 231 or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPI 480 or MBB 355. |
| MBB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MBB | 444 | Techniques in Functional Genomics | Practical introduction to modern functional genomics techniques, including microarray analysis and DNA sequencing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 440 or MBB 440 (with C or better if completed) |
| MBB | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation, immunologic detection, and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or MBB 347 with C or better; Credit is allowed for only MBB or MIC 445 |

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| MBB | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques; plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB or MIC 446 |
| MBB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Minimum 3.3 GPA; Molecular Biology student |
| MBB | 490 | Capstone: Issues in Biotechnology | Integrates science and biotechnology industry issues dealing with intellectual property, regulatory issues, business practices, and commercialization. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: BIO 340 or MBB 347 with C or better |
| MBB | 491 | Capstone: Issues in Molecular Biosciences | Integrates molecular science and societal issues dealing with ethics, regulatory issues, and societal needs that pertain to molecular biosciences. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Prerequisite(s): BIO 340 or MBB 347 with C or better |
| MBB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MBB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MBB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| MBB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |
| MBB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Minimum 3.0 GPA; Molecular Bioscience/Biotechnology student |
| MBB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MCB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 501 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 504, MCB 504, or BIO 598 (Bioimaging Current Techniques); Credit is allowed for only BIO or MCB 503 |
| MCB | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| MCB | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Credit is allowed for only ASM, BIO or MCB 506 |
| MCB | 540 | Functional Genomics | Functional relevance of genomic sequences; DNA arrays, proteomics, analysis of genomic information for metabolic physiology of organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MCB | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MCB or NEU 555 |
| MCB | 556 | Advanced Molecular and Cellular Biology II | Continuation of MCB 555. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MCB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| MCB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 701 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| MCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 447 | Diversity in Families and Communities in Multicultural Settings | Diversity and the changing role of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| MCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| MCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| MCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| MCE | 548 | Multicultural Perspectives on Teaching and Learning | Facilitates understanding of key components related to cultural diversity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCO | 120 | Media and Society | Role of newspapers, magazines, radio, television, and motion pictures in American society. Designed for nonmajors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only JMC 110, MCO 110 or 120 |
| MCO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MCO | 418 | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 430 | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 120 | Media and Society | Role of newspapers, magazines, radio, television, and motion pictures in American society. Designed for nonmajors. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Credit is allowed for only JMC 110, MCO 110 or 120 |
| MCO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |

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| MCO | 240 | Media Issues in American Pop Culture | Examines the production and consumption of popular culture as disseminated by the mass media with emphasis on the societal implications. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | |
| MCO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 302 | Media Research Methods | Surveys research methods used in the social sciences, with a focus on mass communication. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major with minimum cumulative 2.50 GPA OR nonmajor with minimum cumulative 2.00 GPA OR graduate Mass Communications major OR ASU Online student with minimum cumulative 2.00 GPA |
| MCO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 418 | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 420 | Strategic Sports Communication | Covers the wide-ranging field of strategic sports communication. Prepares students for an entry-level position in the strategic sports communication field. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication or W. P. Carey major; minimum 45 hours |
| MCO | 425 | Digital Media Literacy | Helps students begin to navigate the 21st-century media, starting by becoming active users of media, not just passive consumers. The Internet-fueled democratization of media creation has enabled anyone to be a publisher, and given audiences' almost infinite choices, with both great and questionable effects. In a world of information abundance, it can be difficult to discern fact from opinion and truth from fiction. We need to know how to wade through this barrage of information with a critical eye, to be better informed, and ultimately become creators of media ourselves. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism & Mass Communication major; minimum 2.50 GPA OR non-Journalism & Mass Communication major; min 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate MCO major. Credit for only MCO 425 or MCO 494 (Digital Media Literacy) |
| MCO | 430 | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 435 | Social Media | Explores and critically analyzes the social, cultural, legal, ethical, economic, and technological dimensions of social media tools from Facebook to Foursquare, Twitter to Flickr and beyond. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 450 | Visual Communication | Theory and tradition of communication through the visual media with emphasis on the continuity of traditions common to modern visual media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | HU | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 455 | War and Mass Media | Provides a better understanding of the role and impact of the mass media in shaping public perceptions about one of humanity's most monumental undertakings, the act of war. Through a combination of lectures, readings, documentaries, and motion pictures, examines and critically analyzes media portrayals, real and fictional, of issues, events, and the changing dynamic among; the government, the military, and public opinion as shaped by the media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate, and image creation. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 460 | Race, Gender, and Media | Readings seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | C | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |
| MCO | 465 | Sports and Media | Designed for aspiring journalists and media users, explores why great sports journalism is essential to our society. Establishes the goals, dreams, and expectations for sports journalism and introduces ethical philosophy and popular ethical models and decision-making tools. Students then apply these tools to sports journalism. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 473 | Sex, Love, and Romance in the Mass Media | The role of the mass media in constructing and/or reinforcing unrealistic mythic and stereotypic images of sex, love, and romance. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| MCO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 498 | Pro Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | |
| MCO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 502 | Journalism Skills | Teaches basic journalism skills including print, broadcast, and online. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 8 | | Pre-requisite: Master of Mass Communication student; Credit is allowed for only MCO 502 or 591 (Journalism Skills) |
| MCO | 503 | Media Law | Examines philosophical and legal aspects of press freedom. Emphasizes First Amendment theory evolution from 1791 to present. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 505 | Depth Reporting | Introduces strategies for writing in-depth newspaper or magazine articles. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 510 | Data Journalism | Uses data to tell stories, negotiates with government officials for public records and uses the Internet and other online sources to find information and sources for stories. Uses computer spreadsheets, database software, mapping programs and statistical techniques and explores how these tools can be used across a wide variety of beats and stories. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 515 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 525 | 21st-Century Media Organization and Entrepreneurship | Focuses on the future of journalism, the future of journalism business organizations and entrepreneurship, new media experiences, online solutions to popular media problems, financial realities of the media, and media innovation. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 526 | Advanced Issues in 21st-Century Sports and Media | Through critical analyses of major contemporary issues in sports and media, provides tools and information needed to more fully engage in and become fluent with the main conversations about the business, technology and the future of sports journalism. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major |
| MCO | 529 | Ethics and Diversity in Sports Journalism | Explores the connection among sports media, journalism and society in an ethical and issue-oriented context. Students gain an understanding of the issues and ethics of the sports journalism profession while becoming better and more informed consumers of sports media. At the end of the course students have a better understanding of the importance of sports in our society and how that is reflected in coverage by local and national media outlets. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major; MCO 502 |
| MCO | 530 | History, Philosophy, and Ethics of Journalism | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 531 | Advanced Broadcast Reporting | News and information practices of networks, stations, and industry. Practice in writing, reporting, and editing with emphasis on video. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 535 | Latino and Transnational Issues | Explores Latino communities and U.S.-Mexico transnational issues. Students can move on to the Carnegie-Knight News21 Initiative in which they develop sophisticated multimedia reporting projects. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Masters of Mass Communication student; Credit is allowed for only MCO 535 or 598 (Latino and Transnational Issues) |
| MCO | 536 | Public Relations Research | Learns about the importance of research in communications, conducts research using qualitative and quantitative methods, and analyzes data to understand implications within a specific communications context. Critically evaluates published academic and professional research and exposes types of research and their application in the field of public relations. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Master of Mass Communication major. Credit is allowed for only MCO 536 or 598 (PR Research) |
| MCO | 540 | Sports Reporting | Sports reporting, writing, scriptwriting and video production. Fast-paced and demanding. Students report and write/produce professional-level, clear, well-reported, accurate stories and video packages about athletes and sports stories newsworthy in the Valley and beyond. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major; MCO 502 |
| MCO | 550 | Issues in Coverage of Business and the Economy | Exposes the basics of business and economic reporting, one of the fastest-growing areas of journalism. Students learn what skills are needed to cover business and economic stories as well as the basics of how private companies operate and the factors that drive the economy. They also learn about opportunities in the field and hear from leaders in business journalism. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): ASU graduate online student OR Masters of Mass Communication major |

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| MCO | 551 | Better Business Storytelling | Examines the best practices for business storytelling and equips students with the tools necessary to produce compelling in-depth financial stories. Identifies quality story ideas and methods for cultivating and interviewing sources. Sharpens various advanced reporting and writing techniques, including scene building and character construction, needed to execute narrative business stories and other high-level journalistic pieces. Gains skills needed to develop a reporting plan, structure stories effectively and produce vivid writing. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 552 | Data in Business Journalism | Uses Excel and public databases, ratios in financial statements and 990s, localizes economic indicators; researches stocks, bonds, derivatives, currencies and commodities; uses the Bloomberg terminal and creates simple data visualizations. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 553 | Reporting on Business and the Economy | Trains students in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication major; MCO 502; Credit is allowed for only MCO 553 or 598 (Reporting on Business and the Economy) |
| MCO | 555 | Digital Media Entrepreneurship | Students identify a marketable idea and transform it into a product and/or company. In the process, they learn about key concepts of entrepreneurship and practice skills that they can employ as entrepreneurs themselves. Students are exposed to a range of national and regional entrepreneurs and emerge with a deeper understanding of entrepreneurship's importance within the media and communications landscape. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): graduate Mass Communication major. Credit is allowed for only JMC 455, JMC 494 (Digital Media Entrepreneurship), MCO 555, or MCO 598 (Digital Media Entrepreneurship) |
| MCO | 560 | Arizona Media Law | Case study approach to first amendment issues, media access, libel, confidentiality, and invasion of privacy as applied to media organizations in Arizona. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 570 | Master of Mass Communication Capstone | Master's degree hands-on culminating experience. Students may specialize in the various areas, i.e. print, broadcast, online, digital media, or public relations. | Y | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 710 | Research Methodology in Mass Communication | Identifies research problems in mass communication and provides an overview of questionnaire construction as well as attention to survey, historical, content analysis, experimental and legal research methods. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism Mass Communication PHD students |
| MCO | 711 | Critical, Historical, Legal Research Methods in Mass Communication | Critical, legal and historical methods necessary to conduct qualitative mass communication research. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PhD student |
| MCO | 712 | Freedom of Expression Theory | Examines philosophical and legal aspects of press freedom; emphasizes First Amendment theory evolution from 1791 to present. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PhD student |
| MCO | 720 | Mass Communication Theory | Analyzes various theoretic models of mass communication with emphasis on the applications of these theories to professional communication. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 722 | Philosophy of Mass Communication | Mass media as social institutions, particularly interaction with government and public; emphasizes criticism and normative statements. Seminar. Prerequisite: Journalism and Mass Communication PhD student. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 755 | Research Apprenticeship | Students and faculty work on a research project with the expected outcome of a scholarly publication. | N | RSC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication PhD student |
| MCO | 765 | Teaching Apprenticeship | Assists PhD students with the transition from the industry to the classroom in order to become better university instructors. | N | REC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-2 | | Pre-requisites: Journalism and Mass Communication PhD student |

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| MCO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MDC | 211 | Introduction to Digital Sound | Examines how technology is used as listeners, creators, critics, remixers, and a wide variety of other roles to participate in and gain a deeper understanding of music and its role in our lives. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for MDC 211 or MUE 294 Open Minds, Digital Ears |
| MDC | 311 | Composing and Performing for Hybrid Ensembles | Provides opportunities to perform music in a variety of digital and hybrid contexts using both physical and digital instruments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only MDC 311 or MUE 394 (Performing in Digital and Hybrid Music Groups) |
| MDC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MDC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MDC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MDL | 410 | Laboratory Leadership | Clinical lab leadership and management. Applies the principles of personnel management and supervision, allocation of resources, and staff communication. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite: Admission to Medical Laboratory Science program |
| MDL | 420 | Advanced Clinical Urinalysis and Body Fluids | Theory and applications of principles in urinalysis with emphasis on the etiology, pathophysiology, and clinical manifestations of renal and other metabolic defects as reflected by the analysis of urine and other body fluids. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 421 | Advanced Practicum in Clinical Urinalysis and Body Fluids | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of urine and body fluids, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 420 with C or better |
| MDL | 430 | Advanced Hematology and Hemostasis | Theory and application of principles in hematology, with emphasis on techniques to evaluate blood dyscrasias and analyze body fluids. Etiology, pathophysiology, clinical manifestations, and treatment of blood dyscrasias/hemostatic defects. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 431 | Advanced Practicum in Hematology and Hemostasis | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of blood samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| MDL | 440 | Advanced Immunohematology and Immunology | Theoretical and practical application of clinical immunology and immunohematology. Emphasizes serological techniques that aid disease diagnosis and blood donor selection. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; MIC 205; Admission to Medical Laboratory Science program |
| MDL | 441 | Advanced Practicum in Immunohematology and Immunology | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 440 with C or better |
| MDL | 450 | Advanced Clinical Microbiology | Theoretical and practical application of clinical microbiology. Emphasizes identification of pathogenic organisms, molecular techniques, mycology, virology, and parasitology. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 451 | Advanced Practicum: Clinical Microbiology | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 450 with C or better |
| MDL | 460 | Advanced Clinical Chemistry | Theoretical and practical applications of clinical chemistry with particular emphasis on correlation of test results to disease status, statistical analysis, pre-analytical testing, critical values, calibration, and trending and tracking of quality control results. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 461 | Advanced Practicum: Clinical Chemistry | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis routinely used clinical chemistry testing. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: MDL 460 with C or better |
| MDL | 470 | Research Paper | Focuses on the creation of a research paper, written in a scientific fashion, on a relevant topic in the clinical laboratory field. | N | RSC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 460 |

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| MDL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| MED | 100 | Introduction to Medical Studies | Presents basic concepts related to sciences, social sciences, humanities, statistics and other topics related to medical and health studies. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | |
| MED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 417 | Impact of Violence on Health | Approaches violence from a public health perspective, using the Centers for Disease Control, National Center for Injury Prevention and Control, as a benchmark. Applies an interprofessional approach to violence, to include medicine, nursing, law, law enforcement, social work, psychology, economics and education, among others. Discusses principles of epidemiology, underlying etiologies and sequelae and evidence-based strategies for prevention throughout the course. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours |
| MED | 445 | Science of Helping in Health | One of the strongest weapons in the health care arsenal is helping people make healthier lifestyle choices. But this weapon is only effective when it results in sustained behavior change. Explores the complex interactions among genetics, biology, psychology and society that drive lifestyle choices and the science surrounding motivation and compliance in facilitating behavioral change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): Minimum 45 hours |
| MED | 450 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: HCD 100 or MED 100. Credit is allowed for only HCD 301 or MED 450 |
| MED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| MED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| MED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 322 | Structural Mechanics | Three-dimensional stress and strain analysis, generalized Hooke's Law, failure theories for ductile and brittle materials, combined loading, stress concentrations, energy methods, mechanical vibrations and structural dynamics, fatigue. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical Engineering BSE student; MAE 213 and 384 with C or better; MAT 267 or 272 with C or better; Credit is allowed for only AEE 325 (or MAE 325), MEE 322, or MAE 394 (Structural Materials in Aerospace) |
| MEE | 323 | Computer-Aided Engineering II | Introduces finite-element analysis, pre- and postprocessing, solving problems with FEA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2 | | Prerequisite(s) with C or better: BSE Aerospace Engineering major; AEE 325 (or MAE 325 or 394 Aerospace Structures and Materials); MAE 214 or BSE Mechanical Engineering major; MAE 214; MEE 322 (MAE 322) |
| MEE | 340 | Thermofluids II | Intermediate concepts of thermodynamics, fluid mechanics, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; MAT 267 or 272 with C or better; Pre- or corequisite(s): MAE 384 with C or better if completed |
| MEE | 342 | Principles of Mechanical Design | The design process; conceptual and embodiment design of mechanical elements; form synthesis; material selection, failure modes, manufacturability tolerances, common mechanisms and machine elements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 322 with C or better; MSE 250 with C or better; Pre- or corequisite(s): MAE 318 and MEE 323 with C or better if completed |
| MEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |

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| MEE | 446 | Energy Systems Design | Applies mechanical engineering principles and techniques to modeling, analysis, and synthesis of energy systems and components. Design optimization. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s) with C or better: MAE 400; MEE 340, 482; BSE Mechanical Engineering (Energy and Environment) major |
| MEE | 482 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics, property relationships, power and refrigeration cycles, and reactive systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; Credit is allowed for only MAE 382 or MAE 570 or MAE 598 (Thermodynamics) or MEE 482 |
| MEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| MEE | 488 | Mechanical Engineering Design I | Conceptual and embodiment design; modeling; rapid prototyping. Team project. MEE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Mechanical Engineering major; MAE 301 and 318 and 384 with C or better; MEE 340 and 342 with C or better; Pre- or corequisite(s): MAE 400 with C or better if completed |
| MEE | 489 | Mechanical Engineering Design II | Detail design; fabrication and testing. Team project. MAE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 488 with C or better |
| MEE | 491 | Experimental Mechanical Engineering | Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MAE 301 and 318 with C or better; MEE 340 with C or better |
| MEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| MEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| MEE | 434 | Internal Combustion Engines | Performance characteristics, combustion, carburetion and fuel-injection, and the cooling and control of internal combustion engines. Computer modeling. | N | LEL | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 340 or MEE 482 with C or better; Credit is allowed for only MEE 434 or MAE 598 (Internal Combustion Engines) |
| MET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 211 | Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. May be repeated for credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre/Co-requisites: PHY 121 (or PHY 111 as pre-requisite), MAT 265 or MAT 270 |
| MET | 212 | Applied Engineering Mechanics: Dynamics | Masses; motion kinematics; dynamics of machinery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 211 (or CON 221 or MAE 212); MAT 266 (or MAT 271) |
| MET | 213 | Applied Mechanics of Materials | Stress, strain, stress-strain relations. Axial, shear, bending, torsional and combined loads and deflections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 211 or CEE 210, or MAE 212 |
| MET | 214 | Applied Mechanics of Materials Laboratory | Measurements of loads and deformations relating stress and strain in axial, shear, bending, torsional, and combined loading configurations. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: MET 213, MAE 213, MSE 211, CON 223, CEE 213 OR be co-enrolled in MET 213 |
| MET | 230 | Introduction to Engineering Materials | Introduces materials and their properties, emphasizing basic concepts and structures and how these properties relate to manufacturing and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| MET | 231 | Manufacturing Processes | Design documentation and material processes on plastics, ferrous and nonferrous materials, emphasizing orthographic projection, geometric dimensioning and tolerances. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 160 and MET 230 |
| MET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 300 | Applied Material Science | Principles of materials science emphasizing concepts relevant to design, manufacturing, and use. Covers metals, polymers, ceramics, and composites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR MSE 250 OR Applied Science (Manufacturing Technology & Management) major; MET 230 |
| MET | 302 | Welding Survey | Theory and application of industrial welding processes; introductory welding metallurgy and weldment design; SMAW, GTAW, GMAW, oxyacetylene, and brazing experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering student |
| MET | 309 | Nondestructive Testing and Quality Assurance | Part and material inspection using metrology and nondestructive inspection tools and techniques. Theory and application with use of pertinent standards. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |

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| MET | 321 | Introduction to Automotive Engineering | Engineering principles and the design of ground vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MET 212. Pre- or corequisite(s): MET 213, 340 |
| MET | 331 | Machine Design I | Applies mechanics to design of machine elements and structures. Stress analysis, failure modes, tolerances, cylindrical fits, and shaft design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 213 (or CON 223 or MAE 213) |
| MET | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables. Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: PHY 112 or PHY 131; MAT 266 or MAT 271; Credit is allowed for only EGR or MET 340 |
| MET | 341 | Manufacturing Analysis | Organizational and functional requirements for effective production. Analysis of industrial specifications, geometric dimensioning and tolerancing, costs, and group technology. Writing assembly production plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 344 | Casting and Forming Processes | Analyzes various forming processes to determine load requirements necessary for a particular metal-forming operation. Information used to select equipment and design tooling. Metal casting processes and design of castings. Introduces powder metallurgy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major; MET 300 (or MSE 250) |
| MET | 345 | Advanced Manufacturing Processes | Material removal processes emphasizing advanced turning, milling, and machinability studies using cutting tools. CNC programming for machining and turning centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 351 | Introduction to Automation | Introduces automation. Topics include assembly techniques, fixed and flexible automation systems, robots, material-handling systems, sensors, and controls. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 210 |
| MET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 396 | Professional Orientation | Topics related to a successful career in engineering technology industry. Includes safety, life-long learning, ethics, and career planning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisite: Junior or Senior standing |
| MET | 401 | Quality Assurance | Statistical quality control methods, design of experiments, sampling, gauge requirements and specifications, use of quality assurance tools. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: STP 420 (or APM 301); Credit is allowed for only MET 401 or 501 |
| MET | 409 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only MET 409 or 509 |
| MET | 410 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 341; Credit is allowed for only MET 410 or 510 |
| MET | 415 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 341; STP 420; Credit is allowed for only MET 415 or 515 |
| MET | 416 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Pre-requisite: MET 341; Credit is allowed for only MET 416 or 516 |
| MET | 418 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300 or MSE 250. Credit is allowed for only MET 418 or 518 |
| MET | 421 | Vehicle Powertrains | Internal combustion engine design, performance and operation, and power transmission systems within vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321 |
| MET | 423 | Vehicle Chassis and Running Gear Design | Design and manufacture of chassis, structures, steering and braking systems and components, wheels and tires, suspension systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321; MET 331 |
| MET | 424 | Vehicle Electrical Systems | Vehicle electrical power and signal systems, computer control and analog control systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210; MET 321; MET 421 |
| MET | 426 | Vehicle Thermal Design | Heat management in vehicle systems, including thermal design of engine and transmission cooling systems, cabin heating, and air conditioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 421; Pre/Co-requisite: MET 434 |
| MET | 427 | Vehicle System Integration and Testing | Systems engineering principles. Design of the interfaces between vehicle subsystems. Testing of integrated systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 423; MET 424 |
| MET | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 or MAE 240; Credit is allowed for only EGR or MET 432 |
| MET | 434 | Engineering Thermo-Fluids III | Transient conduction, convection and radiation heat transfer, heat exchangers, thermo-fluid systems engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 435 | Alternate Energy Sources | Alternate energy systems, energy use and its impact on the environment, and demonstrating practical alternative energy sources to fossil fuels. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 438 | Machine Design II | Applies mechanics to the design of machine elements and structures. Emphasizes basics of gears, springs, brakes, clutches, and bearings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MET 331 OR Fulton Schools of Engineering graduate student |
| MET | 440 | Finite Element Analysis | Analyzes machine elements, frames, and aerospace structures employing finite element analysis and software. Includes sensitivity analysis and estimating accuracy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 331 |
| MET | 442 | Specialized Production Processes | Nontraditional manufacturing processes, emphasizing EDM, ECM, ECG, CM, PM, HERF, EBW, and LBW. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 (or EGR 294 [Engineering Materials & Manufacturing] or MET 231). Credit is allowed for only MET 442 or MET 502 |
| MET | 443 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 345; Credit is allowed for only MET 443 or 514 |
| MET | 444 | Production Tooling | Design and fabrication of jigs, fixtures, and special industrial tooling related to manufacturing methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): MET 309. Credit is allowed for only MET 444 or MET 504 |

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| MET | 455 | Automation Systems Integration | Applies sensors and devices and their integration with PLCs and computers into automated devices and systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 351 |
| MET | 460 | Capstone Project I | Group project designing, evaluating, and analyzing components, assemblies, and systems. Develop products/manufacturing techniques demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300; 331; 340; 345 |
| MET | 461 | Capstone Project II | Small-group projects applying manufacturing techniques, with emphasis on demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 460 |
| MET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| MET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 501 | Statistical Quality Control Applications | SPC problem-solving techniques for implementation in industrial setting, design and analysis of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 401 or 501 |
| MET | 502 | Specialized Production Processes | Specialized production processes including lasers, electronic beam, abrasive and water jet, and chemical and thermal processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 442 or 502 |
| MET | 504 | Applications of Production Tooling | Design and fabrication of fixtures, jigs, templates, and specialized industrial tooling for manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 444 or 504 |
| MET | 509 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; credit is allowed for only MET 409 or 509 |
| MET | 510 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 410 or 510 |
| MET | 514 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 443 or 514 |
| MET | 515 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 415 or 515 |
| MET | 516 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 416 or 516 |
| MET | 518 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 418 or 518 |
| MET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | |
| MGT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 290 | My Life Venture | Interdisciplinary course that engages students in aspects of self-discovery and entrepreneurship. Students learn about themselves, their decisions, and their goals, and see how entrepreneurship could play a role in their lives. Introduces students to concepts in entrepreneurship and personal finance in the context of not-for-profit, business, political, and artistic realms. Includes both individual and team activities and is open to any ASU student. | N | LEL | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Credit is allowed for only MGT 290 or MGT 294 (My Life Venture) or WPC 294 (My Life Venture) |
| MGT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 300 | Organization and Management Leadership | Analyzes strategic, behavioral, and human resource management perspectives, including principles of strategic management and leadership of human resources. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s) with C or better: ACC 231, 232 or 261; ECN 221 or ECN 231 or IEE 380 or STP 280; MAT 211, 266 or 271; WP Carey, Engr Mgmt, Sec Ed (Bus) major or Business minor; Pre- or corequisite(s): ACC 240, 241, 242 or 271 with C or better if complete |
| MGT | 302 | Principles of International Business | Multidisciplinary analysis of international economic and financial environment. Operations of multinational firms and their interaction with home and host societies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: W. P. Carey BS or BA student (or non-business student with minimum 2.5 GPA and minimum 56 hours); ECN 212 or 214 with C or better; Credit is allowed for only AGB 302 or MGT 302 or BUA 394 Perspectives in Global Business |
| MGT | 303 | Honors Organizational Strategies, Leadership, and Behavior | Overview of business strategy principles, management processes, motivation, and leadership. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisites: W.P. Carey School of Business Honors student; PSY 101 (or PGS 101) or PSY 304 (or PGS 304) or SOC 101 or SOC 301 with C or better; ECN 221 or 231 with C or better. Pre- or corequisite: ACC 241 or 242 or 271 with C or better if completed |
| MGT | 310 | Collaborative Team Skills | Development of skills in managing and working in collaborative environments. Theories and applications in small group dynamics and team facilitation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student OR Non-business student with min 3.5 ASU cum GPA and min 56 earned hours. |
| MGT | 320 | Organizational Behavior | Management processes, fundamentals of business-level strategy, individual difference issues, motivation and leadership of people in organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites with C or better: ACC 241 (or ACC 242 or 271); ECN 221 (or ECN 231); MGT 300 (or MGT 303); PSY 101 (or PGS 101) or PSY 304 (or PGS 304) or SOC 101 (or SOC 301); BS Business Entrepreneurship or Management major |
| MGT | 340 | Creativity and Innovation | Teaches key concepts and useful tools and techniques of creativity and innovation to students in order to encourage development of creative skills and habits that can propel them in their career or guide them down a path to start a new venture of their own. Coursework and activities involve complex problem solving activities and relevant trend and environmental analysis in order to explore alternative approaches to challenges. Coursework includes both individual and team activities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | L or HU | Pre-requisite: W. P. Carey BS or BA student OR non-business student with min 2.50 ASU cum GPA and min 56 earned hours and Pre/Co-requisite: MGT 290 or 294 My Life Venture; Credit is allowed for only MGT 340 or MGT or WPC 394 (Creativity and Innovation) |
| MGT | 360 | Entrepreneurship and Value Creation | In-depth application of entrepreneurial concepts including opportunity recognition, value creation, and new business management. Students learn how to identify the needs of a market and problem solve to meet those needs through innovation. Students learn common mistakes made in the new venture process and how to work to avoid these mistakes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prereq(s): Business undergrad; ACC 241 or 242 with C or better OR Engineering juniors OR non-business junior; min 2.50 cum ASU gpa; MGT 290 with C or better; Pre- or coreq(s): MGT 340 w/C or better if completed; Credit allowed only for FSE 301 or MGT 360 |
| MGT | 380 | Management and Strategy for Nonmajors | Introduces the functions and applications of management in organizations, including controlling, decision making, leadership, motivation, planning, and social responsibility. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| MGT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W. P. Carey BS or BA student; Pre/Co-requisite: ACC 240 or ACC 241 or ACC 242 or ACC 271 with C or better |
| MGT | 400 | Cross-Cultural Management | Cultural role in international business relations; applied principles of cross-cultural communications, negotiations, and management; regional approaches to business relations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | C & G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better. |

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| MGT | 404 | Chinese Language and Global Business Communication | Capstone course designed to synthesize the knowledge acquired from business, language and cultural coursework in the BA in Business: concentration in Chinese Language and Culture. Analyzes case studies in which Chinese language and cultural skills are used to develop communication strategies in doing business in China. Learn new tools and techniques of analysis to enhance communication with Chinese business counterparts. Applies language and cultural skills to a major project in which students demonstrate complex and integrated knowledge of negotiating with the Chinese and using global business skills. Integrates international business knowledge into presentations, research and the use of sophisticated tools of analysis to provide practical training for the global business environment. Students are proficient in communicating in Chinese prior to taking this course. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; CHI 302 with C or better; LES 305 with C or better; MGT 300 with C or better; SCM 300 with C or better |
| MGT | 405 | Spanish Language and Global Business Communication | Synthesizes the knowledge acquired from business, language and cultural coursework in the BA in Business: concentration in Spanish Language and Culture. Students proficient in communicating in Spanish analyze case studies in which Spanish language and cultural skills are used to develop communication strategies in doing business in Spanish-speaking countries. Students learn new tools and techniques of analysis to enhance communication with their Spanish-speaking business counterparts. Applies language and cultural skills to a major project in which students demonstrate complex and integrated knowledge of negotiating with Spanish speakers and using global business skills. Integrates international business knowledge into presentations, research and the use of sophisticated tools of analysis to provide practical training for the global business environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; LES 305 with C or better; MGT 300 with C or better; SCM 300 with C or better; SPA 314 with C or better |
| MGT | 410 | Responsible Management | Values, core beliefs, legal and ethical mandates and cultural norms as they apply to the conduct of organizations; application through a Service Learning project. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student, or non-business student with minimum 3.5 gpa and minimum 56 hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 411 | Leading Organizations | Comprehensive overview of leadership in organizations. Provides students with understanding of leadership research and its applications to global organizations and the development of leaders. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student or non-business student with minimum 2.50 ASU cum GPA and minimum 56 earned hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 420 | Human Resource Management | Development of skills and knowledge to lead associates effectively; hiring, developing, evaluating, retaining, and rewarding employees. Preparation for leadership roles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 3.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better |
| MGT | 421 | Compensation in Organizations | Develops knowledge of theory and research in motivation, compensation and rewards, and skill in applying such knowledge to important compensation and reward decisions. Discusses strategic compensation and reward systems issues. Explores in detail a variety of monetary and nonmonetary reward systems; the motivational impact these systems have on employees, teams, and CEOs; and the performance impact they have on organizations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 422 | Staffing | Focuses on the effective management of the flow of talent into and through organizations. Covers human resource planning, recruiting and selection, career transitions and other workforce movement. Provides opportunities to develop hands-on skills that are relevant to effectively managing talent flow. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 423 | Training and Development in Organizations | Familiarizes students with the training and development function in organizations. Although tailored to students interested in human resources management, the course may also be relevant to students who may at some point be involved in training and development within an organizational context. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 424 | Employment Law | Provides an overview of U.S. employment law at both the federal and state levels. Reviews employment at will and wrongful discharge, employment torts, privacy, discrimination law, worker's compensation, occupational safety and health, unemployment, federal compensation laws, and the law of noncompetition and trade secrets. Designed for individuals preparing for careers in human resource management, labor relations or dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |

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| MGT | 425 | Global Human Resources | Explores the importance of international business management in the context of international human resource management, including topics on culture, compensation and benefits, international organizations and their structures, international assignment management and the legal and regulatory considerations that global organizations face. Identifies differences in operating a domestic versus international business and how business practices need to be adapted to operate successfully in foreign markets. Covers global strategy and structure; understanding and managing cultural differences; design and alignment of global HRM practices; and the global HR function. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 430 | Negotiations | Improves student's understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. Give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. Emphasizes experiential learning--students spend most of their time participating in exercises and negotiation simulations, as well as discussing negotiation-based cases involving issues that often arise in the workplace. Provides a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: MGT 300 or 303 or 310 with C or better; W.P. Carey BS or BA student or non-business student with minimum 3.00 ASU cum GPA and minimum 56 earned hrs; Students with credit for MGT 494 topic 187 may not take MGT 430 |
| MGT | 440 | Entrepreneurship | Prepares students for the challenges of assembling and growing high-potential innovative ventures through the use of analytical frameworks that encompass uncertainty inherent in entrepreneurship (or in entrepreneurial activity). In-depth discussion of cases provides a strong empirical foundation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; FIN 300, 302 or 303 with C or better; MGT 300, 310 or 303 with C or better |
| MGT | 445 | Business Model Development | Develops a complete strategic business model emphasizing the planning process undertaken by successful small business owners and entrepreneurs. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; MGT 440 with C or better |
| MGT | 446 | Venture Capital Experience | Students learn the details of the startup funding process and available resources. Exposes the history of venture capital and other types of capital, current trends, and the trends that are anticipated in the future. Students learn due diligence process as performed by investors and applies these concepts to building and growing their own ventures. Coursework includes both individual and team activities and is open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: W. P. Carey BA or BS student; ACC 240, 241 or 242 with C or better OR Non-business student; Minimum 2.50 GPA, Minimum 56 hours; Credit is allowed for only MGT 446 or 494 (Venture Capital Experience) |
| MGT | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR non-Business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| MGT | 450 | Consulting Projects | Describes and analyzes business processes. Generates and evaluates alternatives. Creates improvement and implementation plans. | N | PRA | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Prerequisite(s): W.P. Carey BS or BA major; ENG 301 or 302 with C or better; MGT 300 or 303; MGT 411 with C or better; MKT 300, 302 or 303 with C or better; Pre- or Corequisite: FIN 300, 302 or 303 (with C or better if completed) |
| MGT | 459 | International Management | Concepts and practices of multinational and foreign firms. Objectives, strategies, policies, and organizational structures for operating in various environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 302 or ECN 306 with C or better |
| MGT | 460 | Strategic Management | Systems theory of organizations, strategy formulation and administration in organizations, creating organizational cohesiveness, and leading change within organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Pre-requisites: W.P. Carey Management BS student; MGT 303 or 320 with C or better; MGT 410 or 411 with C or better; FIN 300, 302 or 303 with C or better; MKT 300, 302 or 303 with C or better |
| MGT | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| MGT | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| MGT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): W.P. Carey BA Human Resources or BS Business Entrepreneurship or BS Management major |
| MGT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MGT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey BS or BA student OR non-business with min 2.5 ASU cum GPA, min 2.5 ASU bus GPA and min 56 earned hrs; MGT 300 or 302 or 303 or 310 or IBS 300 with C or better |

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| MGT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-7 | | Pre-requisites: W. P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W. P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 502 | Organization Theory and Behavior | Understands human side of organizations through management theories and applications. Develops knowledge and skills for successful management of self and others. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: Specific W.P. Carey students |
| MGT | 513 | Leadership Skills and Principles | Provides an overview of different perspectives and approaches to leadership practice. The overall goal of this course is to enhance students' leadership skills and to develop a plan for developing these skills in the future. The specific learning goals for this course include the following: (1) to gain an understanding of traditional and emerging leadership models and practices; (2) to improve the leadership skills of giving feedback, setting goals, and providing recognition; (3) to explain the role of vision in leadership and to create a personal vision statement; (4) to raise awareness about the methods and approaches used by organizations to develop leadership competencies; (5) to gain insights regarding effective and ineffective leadership through case analyses; and (6) to increase self awareness about leadership competencies by preparing a leadership development plan. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Prerequisite(s): W.P. Carey graduate student |
| MGT | 520 | High-Impact Leadership | Addresses the inherent ambiguity surrounding effective leadership by providing a toolkit of tangible behaviors to ensure leaders create "high impact" in all areas of their professional and personal lives. Emphasizes what high-impact leaders do differently and uniquely to achieve results while also inspiring loyalty in relationships. Covers core topics including building executive maturity and presence, developing and delivering compelling messages, inspiring those around you, building a strong relationship network, establishing credibility, and managing upward relationships. Includes peer dialogue, extensive presentation skills training, and assignments based on students' real-life leadership experiences. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 520 or 591 (High Impact Leadership) |
| MGT | 530 | Negotiations | This course is designed to improve students' understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. This course is designed to give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. The emphasis of the course is on experiential learning - students will spend most of their time participating in exercises and negotiation simulations (including negotiating job offers), as well as discussing negotiation-based cases involving issues that often arise in the workplace. The goal is to provide students with a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 530 or 591 (Negotiations) |
| MGT | 540 | Entrepreneurship | Capstone case-based course covering all aspects of starting a business: opportunity identification, evaluation, concept development, identifying required resources, acquiring those resources, launching the entity, managing growth, and ultimately, harvesting the enterprise. Revolves around a series of cases, readings and class discussions designed to build a comfort level with understanding and solving problems faced every day, in real life, by a broad spectrum of entrepreneurs at various phases of venture development. Significant emphasis on understanding the valuation and financing of entrepreneurial ventures interwoven through discussions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: ACC 502 and FIN 502 with C or better; W.P. Carey School of Business graduate student; Credit is allowed for only MGT 540 or 591 (Entrepreneurship) |

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| MGT | 545 | Becoming Leaders Who Matter | Addresses core questions: What does it mean to be a leader who really matters? How can you become such a leader? Today's competitive and complex environment requires leaders who are equipped with not just the functional and technical skills necessary to run a business but, more significantly, the leadership skills that allow the business and the people involved in it to thrive. Provides an opportunity to reexamine thinking about leadership and assess current skills and competencies in this area. Highly interactive learning environment with case analyses, exercises, discussion, guided reflection activities, assessments and group work. Covers topics such as self awareness (motivations, values, and leadership style), developing perspective as leaders, the social context of leadership, the role of emotions in the workplace, using life experiences to extract leadership lessons. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 545 or 594 (Leading w/Authenticity & EI OR Becoming Leaders Who Matter) |
| MGT | 550 | Toxic Leadership and Dysfunctional Organizations | Examines origins and impact of bad behavior in the workplace. Identifies and investigates dysfunctional organizational policies and toxic leadership practices. Case studies and consultation reports provide students with detailed accounts of destructive leaders motivated by or responding to greed, questionable ethics, organizational and marketplace pressures, crisis and psychopathology. Students learn best practices for early detection of toxic leadership and organizational dysfunction and strategies for positive intervention and transformation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 550 or 591 (Toxic Leadership and Dysfunctional Organizations) |
| MGT | 559 | International Management | Studies international and cross-cultural influences on management processes and development of global leadership capabilities for experienced management professionals. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W.P. Carey Graduate student |
| MGT | 565 | Business Strategy and Public Policy | Takes a managerial perspective to examine the interface between businesses and their external political environments. Potential changes in public policy can affect current operations and future opportunities. Examines how managers can anticipate and affect the formation, modification and enforcement of public policy in various institutional environments. | N | LEL | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: W.P. Carey MBA Executive Program or W.P. Carey School of Business Graduate student; Credit is allowed for only MGT 565 or 591 (Business and Public Policy) |
| MGT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 588 | Strategic Leadership | Explores the general manager as organizational leader. Focuses on competitive advantage and how each functional area contributes to it. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: MBA degree student |
| MGT | 589 | Strategic Management | Formulation of strategy and policy in the organization, emphasizing the integration of decisions in the functional areas. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: MBA degree student |
| MGT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Pre-requisites: Graduate W.P. Carey students |
| MGT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: MBA degree student |
| MGT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MGT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MGT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MGT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 140 | Music as Culture | Introduces a range of practical and intellectual challenges presented by encounters with various kinds of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisites: Music major |
| MHL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 201 | Media Literacy for Musicians | Instruction in basic Macintosh computer literacy, including generic applications and music-specific programs with hands-on experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | CS | |
| MHL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 341 | Music History I | Western European art music from Antiquity through Baroque. Identification/analysis through listening; application of historical and analytical concepts; research project comprising fresh thesis, detailed musical research, personal reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major; MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major; MTC 223 with C or better |
| MHL | 342 | Music History II | Western European, American art music from Classical period to present. Identification/analysis through listening; transfer/application of music/analytical concepts; research project comprising fresh thesis, insightful musical research/reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major; MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major; MTC 223 with C or better |
| MHL | 344 | Music in World Cultures | Examines the relations among music, dance, theatre, religion, and social status in Asia, Africa, Oceania, Europe, and the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | |
| MHL | 363 | Survey of Russian Music | Examines music and musical life in Russia, the Soviet Union, and the post-Soviet C.I.S. from the Middle Ages to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): Music student; MHL 342 with C or better |
| MHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 437 | Music in the Baroque Era | Examines music, culture and aesthetics in the 17th and early 18th centuries. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): Music major or minor; minimum 45 hours. Credit is allowed for only MHL 437 or MHL 494 (Topics in Baroque Music) or MHL 494 (Music in the Baroque Era) |
| MHL | 438 | Topics in 18th-Century Music | Selected topics exploring the musical styles of the 18th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 439 | Topics in 19th-Century Music | Selected topics exploring the musical styles of the 19th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 440 | Music Since 1900 | Examines stylistic trends, major composers and their works, and cultural contexts in music since 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L or HU | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or greater |
| MHL | 456 | History of Opera | Development of opera from its creation ca. 1600 to present. Emphasis placed on major stylistic developments and representative works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 222 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MHL | 466 | North American Indian Music | Various styles of Indian music in the United States, Canada, and Mexico. Open to Music majors and nonmajors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | (L or HU) & C | |
| MHL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MHL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 222 with C or better |
| MHL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MHL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MHL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 532 | Music Bibliography | Major historical and analytical writings; systematic and historical collections of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music student |
| MHL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Graduate Music student |
| MHL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 657 | Topics in Symphonic Literature | Examines the evolution of the symphony and symphonic poem from the early classic era through the 19th century, with emphasis on the analysis of selected works. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 668 | Introduction to Ethnomusicology | Experiencing theory and methodology by being ethnomusicologists through musical performance, primary writings on fieldwork, career structuring, the history of the discipline, its relationship with historical musicology, and the cultural theories which ethnomusicologists draw on. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 670 | Area Studies in Ethnomusicology | Study of the music of a particular culture, country, or area (e.g., music of Mexico, Latin America, China, Africa). | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 675 | History of Choral Music and Institutions | Examines the history of choral music through the lens of choral institutions: patronage, education, ritual, performing forces, status (professional vs. amateur), and locale. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MHL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 205 | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | 206 | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| MIC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MIC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIC | 205 | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | 206 | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | 220 | Biology of Microorganisms | Introductory microbiology for students majoring in the life sciences. Detailed study of microbial cells, their structure, genetics, physiology, and taxonomy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 or 282; CHM 116 |
| MIC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 302 | Advanced Bacteriology Laboratory | Advanced lab techniques in bacterial growth, physiology, and genetics, with an emphasis on quantitative data and formal lab reports. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |

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| MIC | 360 | Bacterial Physiology | Mechanisms and control of cell metabolism, structures, and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 379 | Medical Bacteriology | Principles of medical bacteriology with emphasis on bacterial infections, diagnostic testing, clinical symptoms, pathogenesis, and treatments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 |
| MIC | 380 | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 401 | Research Paper | Paper of 15 or more pages based on library or lab research in collaboration with a faculty member. Required of all Microbiology majors. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Prerequisite(s): MIC 206, 220 with C or better; senior standing |
| MIC | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| MIC | 421 | Experimental Immunology | Introduces the basic techniques, methods, and assays used in immunology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisite: MIC 220, MBB 247, BIO 353 or BIO 360 with C or better |
| MIC | 425 | Advanced Immunology | Surveys recent advances in immunology, including lymphocyte membranes, lymphokines/biochemistry, molecular genetics, theoretical immunology, immunoregulation, neuroimmunology, and immunologic diseases. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420 with C or better |
| MIC | 426 | Medical Immunology | Concepts and clinical applications of medical immunology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 181 (or BIO 188 or MBB 247) and BIO 182 (or BIO 187 or MBB 245) and BIO 353 with C or better |
| MIC | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisite: MIC 420, PSY 325, PSY 425, BIO 353, BIO 462, or BIO 467 with C or better; Credit is allowed for only MIC 427 or PSY 427 |
| MIC | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420, PHI 317, HPS 314, or PHI 428 with C or better; Credit is allowed for only MIC 428 or PHI 428 |
| MIC | 441 | Bacterial Genetics | Surveys genetic exchange and regulatory processes in bacteria and their viruses. Bacteria and viruses as tools in genetic engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 340 with C or better; MIC 220 with C or better |
| MIC | 442 | Bacterial Genetics Laboratory | Techniques of mutagenesis, mapping, and strain and genetic library construction. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre/Co-requisite: MIC 441 |
| MIC | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or MBB 347 with C or better; Credit is allowed for only MBB or MIC 445 |
| MIC | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB 446 or MIC 446 |
| MIC | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and metals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| MIC | 470 | Bacterial Diversity and Systematics | Biology, classification, and enrichment culture of the nonpathogenic bacteria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MIC 302 with C or better |
| MIC | 475 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| MIC | 481 | Bacterial Pathogenesis | Human host-bacterial interactions in infectious diseases with emphasis on pathogenesis and molecular mechanisms of bacterial virulence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better; MIC 360 or MIC 441 with C or better |
| MIC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| MIC | 485 | General Virology | Fundamental principles of viruses, their molecular biology, replication, genetics, and pathogenesis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| MIC | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |
| MIC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |

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| MIC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| MIC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EVO or MIC 520 |
| MIC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 380 | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MIC | 443 | The Microbial Universe | Diversity and physiology of microorganisms with emphasis on recent advances in the biology of microorganisms of environmental and medical importance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353 (LSC 353) with C or better; Pre/Co-requisite: MIC 444 (LSC 445) (with C or better if completed); Credit is allowed for only MIC 205 or 443 |
| MIC | 444 | The Microbial Universe Laboratory | Techniques used to explore the microbial universe with emphasis on structural, metabolic, genetic, and growth characteristics relevant to the identification and characterization of microorganisms of environmental and medical importance. Not open to students with credit in MIC 206. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: LSC 444 or MIC 443 with C or better or co-enrolled in MIC 443 |
| MIS | 101 | Introduction to the Military I | Overview of mission, organization, and structure of the Army and its role in national defense; discussion of current military issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 102 | Introduction to the Military II | Introduces problem-solving methods, critical thinking, decision making, and group cohesion as applied in a military environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 201 | Introduction to Leadership Dynamics I | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 202 | Introduction to Leadership Dynamics II | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 205 | Leader's Training Course | 6-week training program emphasizing practical hands-on skills and leadership development. Taken in lieu of MIS 101, 102, 201, 202. Conducted at Fort Knox, Kentucky. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 301 | Advanced Military Science I | Theory and dynamics of the individual soldier and military units in offensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |
| MIS | 302 | Advanced Military Science II | Theory and dynamics of military units in defensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |
| MIS | 303 | National Advanced Leadership Camp | 6-week training program emphasizing leadership development and advanced military skills, including tactics, land navigation, and physical training. Conducted at Fort Lewis, Washington. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 401 | Advanced Military Science III | Military legal system; preparation and conduct of military training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 402 | Advanced Military Science IV | Military correspondence; career planning and personal affairs in service; conduct of training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 410 | American Defense Policy I | Evolution, organization, and execution of U.S. national security policy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 412 | American Defense Policy II | Contemporary problems and analytical issues in the formation and implementation of U.S. national security. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-12 | | |
| MIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-7 | | |
| MIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-3 | | |
| MIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Military Science | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-3 | | |

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| MKT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | |
| MKT | 300 | Marketing and Business Performance | The dynamic role of marketing within society and organizations. Emphasizes frameworks and analytical tools that ensure customer focus and drive organizational performance. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Marketing W.P. Carey BA or BS or non-business major with minimum 2.50 ASU GPA and minimum 56 hours; ECN 211, 212, 213, or 214 with C or better. Credit is allowed for only MKT 300 or MKT 301 (Fundamentals of Marketing) |
| MKT | 302 | Applied Marketing Management and Leadership | Market planning, execution, and assessment. Emphasizes decision and communication skills related to market opportunity analyses and marketing program development as a core business function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W.P. Carey Marketing BS major; ECN 221 or 231 with C or better; MAT 211 with C or better. Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed |
| MKT | 303 | Honors Marketing Theory and Practice | Covers basic applications of marketing concepts to problems that are common to marketing managers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W.P. Carey Honors student; MAT 211 with C or better; ECN 221 or ECN 231 with C or better. Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed. Credit is allowed for only MKT 300 or 302 or 303 |
| MKT | 311 | Sports Administration | Focuses attention on components ranging from professional sports to collegiate sports, as well as sports-related products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA major; minimum 56 hours |
| MKT | 352 | Marketing Research | Knowledge and skills to make intelligent decisions in the design, evaluation and application of marketing research and market data. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W.P. Carey Marketing student; MKT 302 or MKT 303 with C or better |
| MKT | 365 | Advertising Management | Advertising as a communications tool in marketing and business. Consideration of market segmentation and positioning, creative strategy, media management, and metrics of effectiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BS student; MKT 300, 302 or 303 with C or better |
| MKT | 370 | Professional Sales and Relationship Management | Investigate the vital role of sales, its relationship to other functions within the firm, and its impact on customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 300 or 302 or 303 with C or better; W.P. Carey BA or BS major, or non-business major with minimum 2.50 ASU GPA and minimum 2.50 ASU business GPA and minimum 56 hours |
| MKT | 390 | Essentials of Marketing | Focuses on the nature and processes of marketing with an emphasis on practical application. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business student; Minimum ASU cumulative GPA of 2.00; Minimum 56 hours OR Non-degree OR be a Graduate student (degree seeking or nondegree seeking) |
| MKT | 391 | Essentials of Selling | Focuses on the selling process and its practical applications within consumer and business markets. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |
| MKT | 392 | Essentials of Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): Non-business student, and minimum cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |
| MKT | 395 | Essentials of Advertising and Marketing Communication | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisite: W.P. Carey BA student or non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a Graduate student; Credit is allowed for only BUA 382 or MKT 394 |
| MKT | 396 | Essentials of Services Marketing | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; OR BA Business(Retail Management) major OR Nondegree-seeking student; OR Graduate student (degree seeking or nondegree seeking) |
| MKT | 397 | Essentials of Global Marketing | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in the student's home country and marketing globally. The rapid adoption of technology has fundamentally changed the dynamics of marketing and created new competitive paradigms that must be understood for firms to be successful. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 398 | Essentials of Sports Business | Introduces the concepts of sports business. Builds knowledge, skills and understanding of the fundamentals of sports business. Develops an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and how they impact sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 402 | Consumer Behavior | Applies behavioral concepts in the analysis of consumer behavior and the use of behavioral analysis in marketing strategy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey Marketing student; MKT 352 with C or better |
| MKT | 410 | Sales Management | Constructive investigation of selling processes, their application in business and consumer contexts, and management of the sales function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; MKT 300, 302, or 303 with C or better |
| MKT | 420 | Retail Management | The role of marketing in retailing and retail performance. Challenges and processes of retail management across various institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA Business (Retail Management) major; MKT 300 or 302 or 303 with C or better |
| MKT | 421 | Fan Behavior and Sports Marketing | Focuses on what it means to be a consumer in a sports marketing context society and what, as a marketer, you need to know to develop, evaluate and implement effective marketing strategies for fans. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; MKT 300 or 302 or 303 with C or better |

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| MKT | 425 | Global Marketing Management | Analyzes marketing strategies and practices developed by firms to compete in global markets and adapt to changing international environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | G | Prerequisite(s): W.P. Carey BA or BS major, or non-business major with minimum 2.50 ASU cum GPA and minimum 2.50 ASU business GPA and 56 earned hours; MKT 300 or 302 or 303 with C or better |
| MKT | 430 | Sports Business | Builds knowledge, skills, and understanding of sports business; exposure to leading-edge thought, methods, and practices in sports business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BS student, must have completed MKT 300, MKT 302 or MKT 303 with a grade of C or better. |
| MKT | 431 | Sports Facility Operations and Event Management | Project-based course that encompasses the administration, coordination and evaluation of any type of event related to sports. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; MKT 300 or 302 or 303 with C or better |
| MKT | 435 | Entrepreneurial Marketing | Identifies and evaluates marketing opportunities; motivates an appreciation of entrepreneurial marketing and its different environmental contexts for general marketing principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BA or BS student; MKT 300, MKT 302, or MKT 303 with grade of C or better. |
| MKT | 440 | Digital Marketing in Practice | Puts digital marketing into practice, expanding on the foundations learned from other marketing courses. Covers strategy and planning but focuses on practical application. Designed to jump start the learning process for any student interested in marketing goods and services in contemporary society. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 440 or 494 (Digital Marketing in Practice) |
| MKT | 441 | Sports Relationship Management | Focuses on selling and how to create, maintain and build relationships within the sports context. Students gain knowledge and develop skills in choosing a sales career including attributes of a sales person, sales call preparation, value propositions, creating value for the client, team selling, questioning and listening techniques, negotiating, persuasion and closing techniques. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; minimum 2.50 ASU cumulative GPA; minimum 56 earned hours; MKT 300, 302 or 303 with C or better |
| MKT | 442 | Services Marketing Strategy | Concepts, skills, and strategies for addressing the imperative marketing challenges and opportunities involving service. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing major; Minimum 2.50 GPA; Minimum 56 earned hours; MKT 302 or MKT 303 AND MKT 352 with C or better; Pre/Co-requisite: MKT 402 |
| MKT | 450 | Social Media and Content Marketing | Centers on how to effectively use social media and content marketing to build relationships between a company and its customers. Students learn to create content, how to deliver content through social media and community management, as well as how to optimize content for maximum effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 450 or 494 (Social Media Mktg and Com Mgmt) |
| MKT | 452 | Business-to-Business Marketing Strategy | Concepts, skills, and strategies for performing competitively in the business market where organizations rather than households are the customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 302 (or MKT 303), 352 with C or better; W.P. Carey Marketing major with minimum 2.50 ASU GPA, minimum 2.50 ASU business GPA and minimum 56 hours. Pre- or corequisite(s): MKT 402 |
| MKT | 455 | Brand Management | Focuses on understanding brand management and the concepts associated with building brand equity and managing brand identity and positioning. Students learn how firms create a competitive advantage by incorporating consumer insight into an effective branding strategy. In addition, students gain an understanding of the role of branding on product portfolio management. Heavily features case discussion, projects and real brands. Applies brand management knowledge to an actual branding strategy project for a small firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 455 or 494 (Brand Management) |
| MKT | 460 | Sports Revenue Generation | Focuses on providing a sophisticated understanding of revenue generation in the context of sports. Students gain knowledge of key marketing, management and administrative functions that play a critical role in revenue-generation strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BS major; MKT 300 (or 302 or 303) with C or better |
| MKT | 462 | Competitive Marketing Strategy | Strategy formulation and decision making by the marketing executive. Integrates marketing programs and considers competitive marketing issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing student; MKT 302 or (MKT 303 and MKT 352) with C or better; Pre/Co-requisite: MKT 402. |
| MKT | 465 | Projects in Sports Business | Focuses on providing students with an innovative opportunity to work directly with sports business industry professionals to address real-world and real-time issues faced by these organizations. Students develop an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and of their constantly changing and interactive impact on sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BS major; MKT 300 (or 302 or 303) with C or better |
| MKT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W. P. Carey BA or BS student pursuing the Professional Sales Certificate; MKT 300 (or 302 or 303) with C or better |
| MKT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |
| MKT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MKT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W. P. Carey BS or BA student; MKT 300 (or 302 or 303) with C or better |
| MKT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | IND | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |
| MKT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-7 | L | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |

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| MKT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-3 | | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |
| MKT | 502 | Marketing Management | Managing the marketing function; market and environmental analysis; marketing planning, strategy, and control concepts. Development and management of marketing programs. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: Specific W.P. Carey Graduate students only |
| MKT | 520 | Services Marketing and Management | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 525 | Excel in Services | Focuses on challenges of managing services and delivering quality service to customers. The attraction, retention, and building of strong customer relationships through quality service (and services) are at the heart of the course content. The course is equally applicable to organizations whose core product is service and to organizations that depend on services for competitive. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 530 | Creativity and Innovation | Multidisciplinary approaches to theories and practices of inspiring and managing innovation and change for sustainable competitive advantage. Focuses on both the student's individual creativity and the planning and implementation of innovations, technologies, processes, or systems that pose significant uncertainty. Places special attention on the processes surrounding understanding the consumer, ideation and implementation. Inclusive in this are methods such as environmental scanning, scenario planning, contextual research, storytelling, concept testing and prototyping. Also includes the many aspects of the organization's structure and culture regarding innovation and creativity. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 535 | Global Marketing Strategy | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in a home country and marketing globally. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 540 | Consumer Markets and Brand Strategy | Provides an intensive examination of factors that drive consumer behavior. Covers topics such as understanding factors contributing to a superior value proposition, identifying elements associated with the stability of the existing alternative, specifying components linked to reducing the level of uncertainty associated with the new alternative, articulating independent influences (e.g., regulatory and social) operating in a particular change context, and comprehending biases that exist in the search and decision making process. Also places additional emphasis on brand development as well as on the role that social media assumes in the change process. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 545 | Entrepreneurial Marketing | Introduces the process of developing a plan for starting a business and presenting that plan to potential investors in order to obtain financing. Covers the purposes of a business plan, the varying objectives of different types of investors or financial institutions, and how they complement or conflict with the interests of an entrepreneur. Topics include proprietary positioning, types of organization, and differing management objectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 550 | New Product and Service Development | Intimately familiarizes students with the front end of the new product design process and provides concrete tools for determining strategies for developing new products based on input from customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 555 | Business-to-Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments, and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 560 | Customer Relationship Management | Focuses on the tools, metrics, and systems used to measure and manage customer relationships. Key to the development and use of sound customer metrics are market research skills including competencies in research design, sampling, measurement, data collection, and data analysis. Covers how to use types of data such as surveys, purchased data, transactional data, the Web, and social media to measure and manage customer relationships. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 570 | Advanced Marketing Strategy | Covers strategic marketing concepts (portfolio management and resource allocation, market segmentation and positioning, competitive advantage); marketing tools (perceptual mapping, conjoint analysis, portfolio analysis, regression); and market and competitive analysis (analyze changes in market attractiveness, evaluate different courses of action, plan long term). | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W. P. Carey MBA Full Time student. |
| MKT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: Global Management Graduate student; MKT 502 with C or better |
| MKT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MKT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MKT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| MLS | 501 | Writing about Social Issues: Culture, Gender, Society, and Well-Being in the Southwest | Reading and discussion of nonfiction writing on social issues that integrate cultural, gender, and societal issues that affect the well-being of urban communities with special attention to the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 502 | Religion, Culture, and Health: Where Cultures Intersect | Focuses on how cultural and religious notions may come into conflict around issues of health. Contrasts two societies, not necessarily contemporary, from different continents. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 503 | Ethics, Science, and Culture | Introduces ethics related to the practice of art, science, and medical practice in modern and premodern society. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student OR MAS in American Media and Popular Culture student. Credit is allowed for only FMS or MLS 504 |
| MLS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Master of Liberal Studies student |
| MND | 101 | First-Year Chinese I | Beginning course in Modern Standard Chinese designed for students who have little or no previous background in the language. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, also includes cultural information that go along with language use. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Credit is allowed for only CHI 101 or MND 101 |
| MND | 102 | First-Year Chinese II | Beginning course in Modern Standard Chinese designed for students who have completed MND 101. Different pedagogical approaches such as group practice, role play and situational dialogues are designed to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, also includes cultural information with application to global business communication. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; Credit is allowed for only CHI 102 or MND 102 |
| MND | 201 | Second-Year Chinese I | First part of a two-semester course of intermediate Modern Standard Chinese for students who have successfully completed First-Year Chinese I and II. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing. While linguistic elements are the focus of this course, also includes cultural information that accompanies language use along with a deep emphasis on global work situations. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; MND 102; Credit is allowed for only CHI 201 or MND 201 |

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| MND | 202 | Second-Year Chinese II | Second part of a two-semester course of intermediate Modern Standard Chinese for students who have successfully completed three semesters of Modern Standard Chinese at the college level or equivalent. Builds on the vocabulary introduced in the first three courses, with deeper emphasis on global work situations. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing Modern Standard Chinese. While oral proficiency is the focus of this course, also includes cultural information that accompanies language use in the teaching as well. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; MND 102; MND 201; Credit is allowed for only CHI 202 or MND 202 |
| MSA | 101 | Elementary Arabic I | Introductory Arabic language focuses on pronunciation of Arabic sounds and basic writing skills. Students learn Arabic culture through standard greetings, common phrases, vocabulary and performance of appropriate social behaviors common in the Arab world which prepares students for work in global organizations. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Credit is allowed for only ARB 101 or MSA 101 |
| MSA | 102 | Elementary Arabic II | Continuation of Elementary Arabic I, adopts different pedagogical approaches such as group practice, role play and situational dialogues to help increase listening, speaking, reading and writing skills. While linguistic elements are the focus, cultural and intellectual contexts provide a medium for understanding the Arab-Islamic world and the global business setting. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; Credit is allowed for only ARB 102 or MSA 102 |
| MSA | 201 | Intermediate Arabic I | Directed to students who have completed the first two courses of college-level Arabic. Students reach an advanced level of oral proficiency through concentrating on new verbs, vocabulary and unique structures of sentences which enable them to master a highly sophisticated usage of the language. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; MSA 102; Credit is allowed for only ARB 201 or MSA 201 |
| MSA | 202 | Intermediate Arabic II | Provides advanced ability to understand, read, write and communicate in Arabic and is directed to students who have completed the first two Arabic elementary courses and the first intermediate course. Focuses on transitive, intransitive and passive and active verbs which enable students to express themselves in highly sophisticated Arabic styles and discourse. Students study how Arabic people perceive and communicate important cultural, historical and economic themes as well as major historical figures and their contributions to Arabic society. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; MSA 102; MSA 201; Credit is allowed for only ARB 202 or MSA 202 |
| MSE | 100 | Introduction of Materials Engineering | Engineering design process, concepts about materials, and the materials engineering profession, including teaming, computer models, communication, and societal impact. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 2 | | Pre-requisites: Undergraduate Engineering or University College student |
| MSE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| MSE | 211 | Introduction to Mechanics of Materials | Topics include stress, strain, elasticity, axial loading, torsion, bending, yield criteria, fracture, general energy methods and Castigliano's Theorem. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: PHY 121; PHY 122; MSE 250 with a C or better |
| MSE | 215 | Materials Synthesis | Introduces contemporary techniques for synthesizing both traditional and novel materials and the corresponding correlation to synthesized materials properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre/Co-requisite: MSE 250 with C or better if completed |
| MSE | 250 | Structure and Properties of Materials | Basic concepts of material structure and its relation to properties. Application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): CHM 114 or CHM 113 with Pre- or corequisite(s): CHM 116 |
| MSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 301 | Materials and Civilization | Focuses on exploring how materials technology can change people's lives. Traces how societies evolved based on the access to materials and the ability to exploit them and trade them among nations. Studies the role of materials in a variety of contexts such as food, art, warfare, transportation, medicine, information and energy from the Stone Age through the industrial revolution to the modern world. Analyzes the connection between the dramatic developments in civilization and advances in materials through the lens of structure, properties and processing of materials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Minimum Junior standing; Credit is allowed for only MSE 301 or 394 (Materials and Civilization) |
| MSE | 308 | Sensing the World | Project-oriented science course develops critical thinking and technical skill using Internet modules on the five senses. | N | LEL | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Pre-requisite: MSE 208 |
| MSE | 330 | Thermodynamics of Materials | Principles of statistical mechanics, statistical thermodynamics of single crystals, solutions, phase equilibrium, free energy of reactions, free electron theory, and thermodynamics of defects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate or Materials minor student, OR other majors with minimum 3.00 GPA; MSE 250 or ECE 350 |
| MSE | 335 | Materials Kinetics and Processing | Introduces kinetics in processing of materials as illustrated through real-world materials processing examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 330 |

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| MSE | 355 | Structure and Defects | Elements of the structure of metals and alloys, measurement of mechanical properties, and optical metallography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 250 with a C or better; Pre- or corequisite(s): MAT 343 OR Fulton Engineering graduate student |
| MSE | 356 | Structures, Properties, and Defects Lab | Lab experiments correlating atomic structure, defects and microstructure of processed metals, ceramics polymers and composites to their mechanical and thermal properties. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 355 |
| MSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 415 | Mathematical and Computer Methods in Materials | Mathematical, computational, and statistical methods and computer programming used to model materials science phenomena and materials engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor, OR other majors with minimum 3.00 GPA; MAT 274 or 275 with C or better; MSE 250 with C or better; Credit is allowed for only MSE 415 or MSE 598 (Math and Comp Mthds in MatrIs) |
| MSE | 420 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, deformation, and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 OR Fulton Engineering graduate student; Credit is allowed for only MSE 420 or MSE 514 |
| MSE | 421 | Physical Metallurgy Laboratory | Focuses on analysis of microstructure of metals and alloys and includes correlation with mechanical properties to some extent. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 420 |
| MSE | 440 | Mechanical Properties of Solids | Effects of environmental and microstructural variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355; Credit is allowed for only MSE 440 or MSE 516 |
| MSE | 442 | Fatigue, Fracture, and Creep of Materials | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 442 or MSE 494 (Fatigue, Fracture, Creep) or MSE 540 |
| MSE | 450 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; PHY 131; MSE 355; Credit is allowed for only MSE 450 or MSE 510 |
| MSE | 451 | Introduction to Materials Characterization Lab | Lab for materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; Corequisite(s): MSE 450 |
| MSE | 458 | Introduction to Electronic, Magnetic, and Optical Properties | Introduces electrical, optical, and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 415; Credit is allowed for only MSE 458 or MSE 515 or MSE 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 460 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250; Credit is allowed for only MSE 460 or MSE 494 (Nanomater. In Energy Production) or MSE 560 or MSE 598 (Nanomater. In Energy Production) |
| MSE | 470 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 250 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |
| MSE | 471 | Introduction to Ceramics | Principles of structure and property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 |
| MSE | 475 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 475 or MSE 518 or EEE 518 or MAE 518 or CHE 518 |
| MSE | 476 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 476 or MSE 519 |
| MSE | 482 | Materials Engineering Design | Principles of the design process. Feasibility and optimization. Manufacturing processes, materials selection, failure analysis, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MSE 420 OR Materials minor, Chemistry, Engineering, or Physics major; MSE 355 and 356; minimum 87 hours; Pre- or corequisite(s): MSE 470 and 471 OR Fulton Engineering graduate student |
| MSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| MSE | 489 | Capstone Design Project I | Covers how to plan an open-ended design project, including experience with technical writing and technical presentations. Both MSE 489 & 490 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | L | Co-requisite: MSE 482 |
| MSE | 490 | Capstone Design Project II | Students learn how to conduct an open-ended design project, including experience with technical writing and technical presentations. Both MSE 489 and 490 must be taken to secure L General Studies designation. | N | RSC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 2 | L | Prerequisite(s): MSE 489 |
| MSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |

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| MSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate or graduate student |
| MSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite: graduate Engineering major except MS Electrical Engineering, MS Electrical Engineering (AME), MSE Electrical Engineering, PhD Electrical Engineering, or PhD Electrical Engineering (AME). Credit is allowed for only MAE 501 or MSE 501 |
| MSE | 502 | Partial Differential Equations | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE or MSE 502 |
| MSE | 510 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 450 or 510 |
| MSE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MSE | 514 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, and deformation and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 420 or 514 |
| MSE | 515 | Introduction to Electronic, Magnetic, and Optical Properties | Electrical, optical and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; Credit is allowed for only MSE 515 or 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 516 | Mechanical Properties of Solids | Effects of environmental and microstructural variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MSE 440 or 516 |
| MSE | 517 | Introduction to Ceramics | Principles of structure, property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 519 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 476 or 519 |
| MSE | 523 | Structural and Mechanical Properties of Materials | Designed for first-year PhD students in the School of Materials. Topics include crystallography theory, tensor properties of materials, elasticity, crystal defects, dislocation theory, plasticity, fracture, fatigue, and creep. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 524 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 541 or MSE 524 |
| MSE | 526 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 526 or NAN 511 or PHY 511 |
| MSE | 527 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; MSE 526; Credit is allowed for only PHY 482 or PHY 512 or NAN 512 or MSE 527 |
| MSE | 540 | Fracture, Fatigue, and Creep | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MSE 442, 494 (Fatigue, Fracture, Creep) or 540 |
| MSE | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 544 or MSE 544 or NAN 544 or PHY 444 or PHY 544 |
| MSE | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only NAN 546 or MSE 546 or PHY 546 |
| MSE | 548 | Fundamentals of Microelectronics Packaging | Multidisciplinary course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Fulton Engineering student. Credit is allowed for only CHE 518 or EEE 518 or MAE 518 or MSE 475 or MSE 548 |

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| MSE | 550 | Advanced Materials Characterization | Analytical instrumentation for characterization of materials; SEM, SIMS, Auger, analytical TEM, and other advanced research techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 552 or NAN 552 or PHY 552 or SEM 552 |
| MSE | 553 | Electron Microscopy Laboratory I | Lab support for MSE 552. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Corequisite(s): MSE 552 or PHY 552; Credit is allowed for only MSE 553 or PHY 553 |
| MSE | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent-beam diffraction, and electron holography. Novel developments and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 554 or PHY 554 |
| MSE | 555 | Electron Microscopy Laboratory II | Lab support for MSE 554. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| MSE | 561 | Phase Transformations, Kinetics, and Diffusion in Solids | Hetero/homogeneous diffusion-controlled transformations, order-disorder transformations, and shear (martensitic) athermal transformations in solids. Courses in advanced thermodynamics and structure and properties of materials are strongly recommended in preparation for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 565 | Structural Materials in Nuclear Power Systems | Provides an overview of reactor systems and discusses the structural materials used in reactor components (e.g., fuel/core, wall/blanket, heat exchanger, and steam turbine materials). Discusses design considerations and materials degradation processes that occur in service. Emphasizes the effect of radiation damage on materials properties. Reviews reactor systems, including fission- (e.g., PWR, LWR, BWR, LMFBR) and fusion-based reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only MAE 494 (Structural Materials in Nuclear Power Systems) or MSE 494 (Structural Materials in Nuclear Power Systems) or MSE 565 |
| MSE | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 571 or NAN 571 or PHY 571 |
| MSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student OR Science & Engr of Materials student |
| MSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |

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| MSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSI | 601 | Contemporary Topics in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from the arts and other disciplines that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): doctoral Music students |
| MSI | 602 | Current Issues in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from current public policies, events, and popular culture that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): doctoral Music students |
| MSI | 755 | Historical Research in Music | Required for all PhD in Music students. Knowledge and insights related to conducting historical research in music. Includes development of a mini-proposal for a dissertation on the history of music education, or draft of a historical research paper suitable for presentation or publication. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): doctoral Music students |
| MTC | 123 | Beginning Composition | Intended for freshmen and sophomores in the composition concentration. Introduces composing. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Theory and Composition student |
| MTC | 125 | Basic Music Theory | Notation, scales, keys, modes, intervals, chords, basic part writing and composition. Development of related aural skills through sight-singing and dictation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 221 | Music Theory: 18th Century | Styles, techniques, and idioms of 18th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 125 with C or better |
| MTC | 222 | Music Theory: 19th Century | Styles, techniques, and idioms of 19th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 223 | Music Theory: 20th Century | Styles, techniques, and idioms of 20th-century music; emphasizes innovative treatments of musical elements, analysis, and composition; related aural skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |
| MTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 315 | Modern Arranging I | Analysis of scores and recordings, application of orchestration and four and five-part harmonization techniques frequently used in arranging for the contemporary jazz ensembles and studio orchestra. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUP 236 with C or better |
| MTC | 316 | Modern Arranging II | A continuation of MTC 315, analysis of scores and recordings, application and creation of new arrangements for contemporary jazz ensembles and/or studio orchestra. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite: Bachelor of Music student; MTC 315 with C or better |
| MTC | 320 | Modal Counterpoint | Counterpoint based on 16th-century vocal polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 321 | Tonal Counterpoint | Counterpoint based on 18th-century polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 323 | Composition | Writing music compositions, with emphasis on basic techniques and smaller structures. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Prerequisite(s): MTC 123 with C or better OR BMUS Theory and Composition (Composition) or BMUS Theory and Composition (Theory) major with minimum 55 hours |
| MTC | 327 | Intermediate form and Analysis | Organizing elements in the most important contrapuntal and homophonic musical forms from the Renaissance through the 19th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |

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| MTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 422 | Musical Acoustics | Properties of sound and tone. Harmonic series, instruments, the ear, auditorium acoustics, and the reproduction of sound. Assumes a thorough knowledge of musical notation, intervals, scales, and harmony, or 2 years of music theory. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; Passed audition |
| MTC | 425 | Studies in 20th-Century Theory | Continued development of analytical techniques and aural skill, with an examination of theoretical systems applicable to 20th-century music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 428 | Advanced form and Analysis | Organizing principles of the large forms of musical composition in the 19th and 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 429 | Canon and Fugue | Writing of canons and fugues in tonal style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 321 with C or better |
| MTC | 430 | 20th-Century Counterpoint | Counterpoint studies utilizing 20th-century idioms. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 433 | Orchestration | Studies scoring music for full and chamber orchestras; examines individual orchestral instruments (characteristics and performance techniques). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 436 | Electronic Studio Techniques I | The study of computer music systems emphasizing advanced audio synthesis and resynthesis as well as their application to professional compositional environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MTC 223 |
| MTC | 437 | Electronic Studio Techniques II | Principles of digital electronic music systems and their applications in the composition of electronic music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 440 | Jazz Theory and Ear Training | Advanced study of jazz harmonic systems. Daily oral drills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 441 | Jazz Composition | Creative writing in the smaller forms and in the idiom of jazz. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Music student; MTC 440; MUP 236 with C or better |
| MTC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 495 | Final Project | Half recital of compositions or approval of a large-scale composition or a research paper. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 0 | | |
| MTC | 496 | Theory Project | Supervised individual writing project dealing with music theory. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MTC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | |
| MTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MTC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 516 | Baroque Music | Detailed analysis of selected examples of music from the Baroque period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 517 | Classic Music | Detailed analysis of selected examples of music from the Classic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 518 | Romantic Music | Detailed analysis of selected examples of music from the Romantic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 519 | Late 19th-Early 20th Century Music | Detailed analysis of selected examples of music from the late 19th and early 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 520 | Analytical Techniques | Analytical techniques systematically applied to music. Concentration on structural and compositional procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 523 | Advanced Composition | Advanced music composition, including complex techniques and larger structure. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Graduate Music student |
| MTC | 525 | Pedagogy of Theory | Practices and principles of teaching music theory. Emphasizes most desirable and practical offerings possible. Comparative studies of existing practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 528 | History of Music Theory | Theory from the 17th century to the present. Need not be taken in sequence with MTC 527. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 540 | Jazz Theory and Ear Training | Surveys some of the most influential trends in the jazz tradition with in-depth analysis of harmonic systems, linear elements, and compositional strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MTC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisite: Graduate Music student |
| MTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 723 | Advanced Composition | Special problems in writing in complex forms and textures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MTC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |

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| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 301 | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking, multiple conceptions of quantity, variables, constants, and unknowns, inductive, deductive, and analogical reasoning; rate of change and proportional thinking, algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Admission to the Professional Program |
| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 181 | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 earned hours |
| MTE | 210 | Mentored Tutoring Internship | Introduces math education students to issues of balancing the content of precalculus mathematics with the needs of someone learning it. Addresses core issues, including articulating what is involved in learning the mathematical idea(s); interpreting students' questions; analyzing student thinking and inferring their underlying rationale from a learner-centered perspective; techniques of question-posing, problem-posing, and instructional scaffolding. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Co-requisite: MAT 207 |
| MTE | 250 | Technology and Mathematical Visualization | Uses several software packages for exploring mathematics and for preparing mathematical materials, starting from introductory skills and leading to advanced techniques. Places particular emphasis on using computer software with the aim of visualizing mathematical relationships, structures, and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207, 270, and MTE 210 with C or better |
| MTE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 320 | Conceptual Foundations of 7-12 Mathematics Curricula and Assessment | Focuses on concepts of mathematics curricula and their relationships to perspectives on learning, instruction, and assessment. Using a variety of participation formats (e.g., individual and small group work, and whole group discussions) and directed activities, participants examine curricular principles underlying the historical development of mathematics curricula and assessment, and current curricula and curricular recommendations and controversies surrounding them. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207; MTE 210 and 250 with C or better |
| MTE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in mathematics education. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | C | Pre/Co-requisite: MAT 117 or MAT 142 or other course meeting General Studies MA requirement |
| MTE | 430 | The Development of Mathematical Thinking | This capstone course requires students' sustained engagement with, and analysis of, artifacts from research on learning mathematics from instruction. The artifacts include: curricular/instructional task sequences, samples of student work, video-cases showcasing students' involvement in instruction, problem-solving interviews, and teaching experiments. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MTE 320 with C or better |
| MTE | 482 | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | 483 | Mathematics in the Secondary School | Topics in geometry, number theory, algebra, and analysis. Emphasizes unifying principles. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better |

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| MTE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 485 | Teaching Standards-Based Middle and High School Mathematics | Detailed exploration of the Common Core State Standards (CCSS) for middle school and high school mathematics. In addition to an in-depth coverage of the CCSS content and practices, students engage with, review and analyze existing instructional task sequences addressing the CCSS. Students also design and construct partial and complete lesson plans to cover specific mathematical content and practices. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 271 or minimum 45 hours; Credit is allowed for only MTE 485 or MTE 494 Adv Mthds Tchng Math Sec Schl |
| MTE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| MTE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MTE | 585 | Modern Geometry for Teachers | Euclidean, projective, and non-Euclidean geometries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| MTE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| MTE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MTE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |

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| MTE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 181 | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MTE | 280 | Investigating Quantity: Number, Operations & Numeration Systems | Investigation of mathematical principles and processes regarding the real number system and its properties develop number sense and qualitative reasoning abilities. Designed to meet the requirements for preservice elementary school teachers. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course with C or better |
| MTE | 281 | Investigating Space: Geometry, Measurement, and Visualization | Explores three aspects of geometry: spatial visualization, measurement, and proof. Uses visualization, spatial reasoning, and geometric modeling to solve problems. Provides opportunities for participants (1) to use physical models, technology, and pattern-finding strategies to identify properties of and develop formulas for measuring two- and three-dimensional shapes; and (2) to develop powerful ways of thinking to justify geometric relationships | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course with C or better |
| MTE | 301 | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking; multiple conceptions of quantity, variables, constants, and unknowns; inductive, deductive, and analogical reasoning; rate of change and proportional thinking; algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the Professional Program |
| MTE | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| MTE | 482 | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MTE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 605 | Research-based Practices, Pedagogy and Instructional Leadership in Mathematics | Examines research-based practices, pedagogy, and instructional leadership in mathematics classrooms K-8. Emphasizes learning and teaching mathematics for understanding. Featured practices and pedagogy for fostering symbolic thinking include inductive and deductive concept development, problem-based learning, cognitively guided instruction, learning trajectories, and use of physical manipulatives and virtual tools to facilitate mathematical thinking. Mathematics instructional leadership projects emphasize development of mentoring techniques and professional development expertise. Prepares K-6 and 5-9 mathematics teachers as mathematics teacher leaders, specialists, or coaches in middle schools and the elementary grades. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 610 | Number and Operations 2 | Examines different conceptions of number and operations as the study of (1) patterns and relationships of numbers, (2) the meaning of operations, (3) reasoning through estimations and conjectures, (4) structure in the number system, and (5) modeling. Participants develop a deeper sense of numbers and operations as they progress through the K-8 curriculum. Various manipulatives and electronic tools facilitate investigations. Topics include: base systems, composing and decomposing numbers, operational relationships, operational strategies, integer meaning, and rational numbers. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MUD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |

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| MUD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUD | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| MUD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUE | 101 | The ASU School of Music Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university, the School of Music and the Herberger Institute for Design and the Arts. Covers the music education and music therapy programs in the School of Music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUE 101 or 194 (ASU School of Music Experience for Music Education) |
| MUE | 110 | Introduction to Music Education | Overview of music education and career options. Orientation to student characteristics, teacher roles, teaching qualities, and philosophical and historical foundations. Requires school observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major |
| MUE | 154 | Gesture and Sound | Covers fundamentals of musical leadership through gestures associated with sounds in the performance of music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 161 | Introduction to Music Therapy | Overview of the profession of music therapy and its applications in mental health, rehabilitation, and special education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 162 | Introduction to Music Therapy Lab | Develops skills needed to lead music experiences in a variety of settings. | N | LAB | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music education or therapy major; Corequisite(s): MUE 161 |
| MUE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 211 | Music in Recreation | Materials, methods, and organizational structures appropriate for recreational music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 261 | Music Therapy as a Behavioral Science | Orientation to preclinical experience with emphasis on observation skills, assessment, goal setting, and professional ethics. Requires off-campus observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUE161 with C or better |
| MUE | 262 | Music Therapy as a Behavioral Science Lab | Develops skills needed to lead music experiences in a variety of settings. | N | LAB | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Corequisite(s): MUE 261 |
| MUE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUE | 310 | Music in Early Childhood | Examines music through the lens of the culture(s) of young children, which (though they intersect with adult cultures) are unique, different from adult experiences, and particular to them. Emphasizes the musical content of children's songs as well as the music they hear, and the kinds of musical engagements that are particular to young children. Also emphasizes the uses, functions, and meanings of music for children. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: ENG 102 with C or better; minimum 30 hours |
| MUE | 311 | Music in the Lives of Children and Youth | Examines the role of music in the lives of young people with particular attention to child and youth learning and development (cognitive, social, emotional, personality, musical). Includes examination and critique of music intended for children and youth (e.g., social and gendered meanings), as well as consideration of how music is related to individual and social identity. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: BLE 220, RDG 291, SPE 222 or TEL 215, or minimum 30 hours |
| MUE | 317 | Strings Lab | Students apply educational theory to the development and refinement of specialized skills in string teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 318 | Educational Methods for Cello and String Bass | Students apply educational theory to the development and refinement of specialized skills in string teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 319 | Digital and Hybrid Lab | Provides a foundation for integrating a range of technologies and digital media in music teaching and learning. Encourages critical and creative thinking while considering the possibilities for innovative applications of technology and digital media based upon contemporary curricular, theoretical and pedagogical frameworks. Students demonstrate skills and understanding related to using technology and digital media in the context of musicianship, music teaching and learning. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUE | 327 | Brass Lab | Students apply educational theory to the development and refinement of specialized skills in brass teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 328 | Educational Methods for Trombone, Euphonium, and Tuba | Students apply educational theory to the development and refinement of specialized skills in brass teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview. |
| MUE | 335 | Educational Methods for Guitar | Students apply educational theory to the development and refinement of specialized skills in guitar teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education or therapy interview |
| MUE | 336 | Percussion Lab | Students apply educational theory to the development and refinement of specialized skills in percussion teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 337 | Woodwinds Lab | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 338 | Educational Methods for Double Reed Instruments | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 381 | Music Therapy Research | Statistics and research design appropriate for investigations in music therapy. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L | Pre-requisite: Music Therapy student |
| MUE | 384 | Therapy Preclinical I | Paired students provide music therapy for small groups at a community agency for mentally retarded, geriatric, or physically disabled clients for a minimum of 10 clock hours. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 385 | Therapy Preclinical II | Individual placement in ASU Music Therapy Clinic. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 386 | Therapy Preclinical III | See MUE 385. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 387 | Therapy Preclinical IV | Individual clinical work in a community mental health facility. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 388 | Therapy Preclinical V | See MUE 387. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisites: Music Education or Music Therapy student |
| MUE | 413 | The Art of Teaching Children Music | Methods of instruction, planning, and presentation of appropriate contents in music. For music educators and music therapists. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music student |
| MUE | 415 | The Art of Teaching Contemporary Musicians | Curriculum, student characteristics, and teaching strategies for general music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major |
| MUE | 436 | Percussion Methods for Music Therapy | Provides knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy student |
| MUE | 441 | Psychology of Music | Psychological and physiological aspects of music emphasizing musical behavior, function, perception, and learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 463 | Music Therapy Techniques | Organization, administration, and use of music in rehabilitation with various client populations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 467 with C or better |
| MUE | 465 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; Minimum Junior standing |
| MUE | 467 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 475 | Group Process and Music Therapy | Principles of group process, verbal counseling, professional writing, as related to music therapy practice. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisite: Music Therapy student; MUE 463 (MUE 362) with C or better or Graduate student in Clinical Music Therapy |

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| MUE | 476 | Internship in Music Therapy | Full-time, 6-month, off-campus residency in an approved clinical institution. | N | PRA | N | Z1 | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 211 with C or better |
| MUE | 480 | The Art of Teaching Choral Musicians | Methods of instruction, organization, and presentation of appropriate content in choral music classes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 481 | The Art of Teaching Beginning Instrumentalists | Instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 482 | The Art of Teaching Advanced Instrumentalists | Advanced instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 485 | String Practicum/Methods | For students preparing to administer a string program and teach strings at the elementary level. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | |
| MUE | 489 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy student; MUE 211 with C or better |
| MUE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUE | 501 | Introduction to Professional Music Therapy | Introduces the profession of music therapy through lecture, active discussion, and observations of clinical sessions. Experiential learning is achieved through music making in peer groups. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy graduate student or Clinical Music Therapy graduate student |
| MUE | 536 | Percussion Methods for Music Therapy | Designed to provide knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy, 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM Student |
| MUE | 548 | Introduction to Research in Music Education | Survey of research methods and literature in music education. Focuses on interpretation and evaluation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 549 | Foundations of Music Education | A treatment of historical perspectives, philosophy-aesthetics identified with music education, and learning theories applied to music teaching/learning. Basic research and writing skills appropriate to graduate studies in music education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 550 | Studies in Music Curricula | Scope and sequence of musical experiences. Develops criteria for the evaluation of music curricula. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 552 | Advanced Studies in Secondary General Music | Organization and content of school music classes that are not performance oriented. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 560 | Jazz Pedagogy | Study of pedagogy, repertoire, and technique of instruction in jazz styles, ensemble techniques, and performance practice for school ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 562 | Jazz Rehearsal Techniques | Conducting and rehearsal techniques for school jazz ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 563 | Music Therapy Techniques for Children | Organization, administration, and use of music in rehabilitation with children and adolescents with special needs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM student; MUE 581 with C or better |
| MUE | 564 | Instrumental Music, Advanced Rehearsal Techniques | In-depth analysis of instrumental techniques in preparation for a thorough discussion of band tuning problems and solutions. Discussion of productive conducting and rehearsal techniques for school music teachers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 565 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy Graduate student |
| MUE | 566 | Instrumental Literature and Pedagogy for Schools | Provides an in-depth examination of ensemble music and teaching techniques to instrumental music teachers. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 567 | Professional Practicum I | Students provide music therapy for small groups at a community agency providing services to people who are intellectually disabled, physically disabled, and the elderly. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Therapy Graduate student or Clinical Music Therapy Graduate student |
| MUE | 568 | Choral Music, Advanced Rehearsal Techniques | Musical and vocal techniques necessary for presentation of choral literature. Analysis and experimentation with psychological, acoustical, and other problems of rehearsal and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |

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| MUE | 569 | Professional Practicum II | Continuation of MUE 567. Practicum. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Education Graduate student; MUE 567 with C or better |
| MUE | 570 | Choral Literature for Schools | Comprehensive study and analysis of choral music for the high school with special emphasis on octavo literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 571 | Music Therapy Seminar I: Supervision and Administration | Covers health care administrative skills pertinent to music therapy practice, including budgeting, resource allocation, and staff supervision. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 572 | Music Therapy Seminar II with Lab: Advanced Practice in Music | Deepens and broadens knowledge and skills in music therapy clinical practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 573 | Music Therapy Seminar III with Lab: Music Therapy Theory and Philosophy | Explores current theory in music therapy and develops the theoretical basis for the profession. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM student |
| MUE | 574 | Music Therapy Music Skills I: Improvisation | Teaches new forms of musical improvisation pertinent to music therapy practice, broadening and deepening existing skills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM student |
| MUE | 575 | Music Therapy Music Skills II: Accompaniment | Teaches new forms of musical accompaniment pertinent to music therapy practice, broadening and deepening existing skills. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM student |
| MUE | 579 | Psychology of Music | Nature of musicality and its evaluation. Review of recent research. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 581 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy Graduate student or Clinical Music Therapy Graduate student |
| MUE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 585 | Vocal Acoustics and Production | In-depth approach to the psychological/physiological workings of the vocal mechanism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 586 | Music Therapy Graduate Clinical Project | Develops clinical- and research-based music therapy skills in selected cognate area. | N | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-6 | | Pre-requisites: MUE 571, 572, 574, and 575 |
| MUE | 589 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM Student |
| MUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 754 | Teacher Education Research and Policy | Reading and discussion of research and policy documents in teacher education with a focus on arts and music teacher preparation. Includes development of a research project or essay suitable for publication or presentation, an abbreviated prospectus for a dissertation, or literature review. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |

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| MUE | 756 | Qualitative Research in Music Teaching and Learning | Studies qualitative research and methods in music education, including readings and discussion, data collection and data analysis. Includes development of an abbreviated prospectus for a qualitative dissertation, or a draft of a qualitative research paper suitable for presentation or publication. Prerequisite: doctoral student in music education. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 757 | Quantitative Research in Music Teaching and Learning | Studies quantitative research and methods in music education, including readings and discussion, data collection, and analysis. Includes development of an abbreviated prospectus for a quantitative dissertation or a draft of a quantitative research paper suitable for presentation or publication. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUP | 100 | Concert Attendance | 6 semesters required for all music majors. A total of 4 convocations and 6 approved recitals required each semester. | N | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 0 | | |
| MUP | 101 | The ASU School of Music Experience | Orientation to university and School of Music resources and procedures as well as career planning and guidance. Through various course discussions and assignments, music students examine the concept of academic integrity and its potential impact on their future and learn about taking an interdisciplinary perspective. Required for all music majors. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUP 101 or 194 (ASU School of Music Experience) |
| MUP | 111 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 117 | Applied Jazz Improvisation | Principles, methods, and theory of jazz performance and pedagogy. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 121 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 127 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisites: Music students who have passed audition |
| MUP | 131 | Class Piano | 4-semester sequence (with MUP 132, 231, and 232) designed for those with little or no piano experience. Emphasizes keyboard technique, sight reading, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 132 | Class Piano | 4-semester sequence designed for those with little or no piano experience. Emphasizes keyboard technique, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 131 with C or better |
| MUP | 133 | Class Voice | 4-semester sequence (with MUP 134, 233, and 234) open to all students. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |

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| MUP | 134 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 170 | Music Theatre I | Development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUP | 172 | Music Theatre II | Further development of performance skills for opera and music theater, broadening the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to research and develop characters in order to perform various types of songs and dramatic scenes. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MUP 170 |
| MUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisites: Music students who have passed audition |
| MUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music students who have passed audition |
| MUP | 209 | Beginning Choral Conducting | Essentials of choral conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 210 | Beginning Instrumental Conducting | Essentials of instrumental conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 217 | Applied Jazz Improvisation | Emphasizes basic jazz literature, chord symbol reading, melodic patterns and concepts, ear training, analysis of improvised solos, and pedagogical issues. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 117 with C or better |
| MUP | 231 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP132 with C or better |
| MUP | 232 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP231 with C or better |
| MUP | 233 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 234 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 235 | Jazz Piano | 2-semester sequence (with MUP 236) designed for jazz keyboard experience. Emphasizes chord symbol reading, simple improvisation, and voicing. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 236 | Jazz Piano | See MUP 235. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 250 | Diction for Singers | Use of phonetics in the study of song and opera literature. Language emphasis differs each semester. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 270 | Music Theatre III | Further development of performance skills for music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to develop characters and project various moods and scenarios through song. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 172 |
| MUP | 272 | Music Theatre IV | Further development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students conduct in-depth analyses of characters from both the historical and contemporary repertoire of music theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 270 |
| MUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music students who have passed audition |
| MUP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 301 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 232. Emphasizes accompaniments, ensemble playing, score reading, advanced harmonizations, repertoire, technique, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 232 with C or better |
| MUP | 302 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 301. A sequential continuation of MUP 301 skills that include both group and studio instruction. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP301 with C or better |
| MUP | 311 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 317 | Applied Jazz Improvisation | Emphasizes listening, analysis, and performance of advanced jazz literature and composition in contemporary styles. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |

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| MUP | 319 | Advanced Audio Engineering in the Arts | Synthesis and application of analog and digital recording methods (voices and instruments), mixing and the advanced skills needed to create professional recordings (CDs, DVDs, internet sound files, etc.). Further emphasis on electronic music production, computer based applications, MIDI, and contemporary studio hardware. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Minimum Junior standing in the Herberger Institute for Design in the Arts |
| MUP | 321 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 327 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Pre-requisites: Music students who have passed audition |
| MUP | 337 | Studio Instruction: Collaborative Piano | Repertoire to be selected from vocal and instrumental literature. 1 hour lesson per week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 339 | Choral Conducting | Elements of choral conducting technique and interpretation. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 209 or MUP 210 |
| MUP | 340 | Instrumental Conducting | Fundamentals of score reading and interpretation of instrumental music. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 210 with C or better |
| MUP | 370 | Music Theatre V | Development of specific skills for musical-dramatic interpretation and of specific physical theatre skills for the actor. Performance-based class provides an opportunity to connect physically, emotionally and intellectually to the body of the musical theatre actor, and provides an opportunity to explore strong, clear acting choices. Students participate in various movement theories and techniques in class and complete independent performance projects utilizing the body and the body with voice, choosing a song from various categories to workshop and perform. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: MUP 272 |
| MUP | 373 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles); Section 2 (Chorus). May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 374 | Music Theatre: Production | In-depth study of approaches to Technical Music Theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) is followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 385 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 388 | Collaborative Piano | Performance class for collaborative piano majors. Repertoire includes vocal and instrumental selections. Advanced analysis of ensemble techniques, style and performance practice in preparation for graduate study or professional application. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: 4 terms of MUP 127 with C or better |
| MUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 431 | Basketball Band | The primary goal of any ensemble at ASU is personal musical growth. To accomplish that objective the ensemble studies and performs a range of wind band repertoire. During the term, basketball band members participate in assigned basketball games on campus as well as post-season tournament performances for those who qualify. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition; Credit is allowed for only MUP 431 or 494 (Pep Band) |
| MUP | 440 | Keyboard Harmony | Performance-oriented class emphasizing chord progressions, harmonization, figured bass realization, stylistic improvisation, transposition, open score reading, and sight reading. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 442 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. Curriculum accommodates the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |

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| MUP | 443 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |
| MUP | 448 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 448 or 494 (Classical Style: Performance and Analysis) |
| MUP | 449 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 449 or 494 (Unaccompanied Bach: Performance & Analysis) |
| MUP | 450 | Choral Union | Large mixed ensemble focuses on the study, synthesis, and performance of major choral masterworks while gaining in-depth understanding of significant choral repertoire and historical ramifications. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 451 | Repertoire | In-depth study of music for performing, involving advanced interpretive and technical concepts from historical, stylistic, and performance-related perspectives. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Completed 4 semesters of 100-level studio instruction |
| MUP | 453 | Song Literature | Early Italian, English, German, and French art song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 454 | Song Literature | American, Russian, Spanish, Scandinavian, and contemporary song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 455 | Men's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of a variety of historically and musically standard male repertoire, within historical context. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 457 | Women's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of historically and musically important repertoire for treble voices. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 459 | Barrett Choir | The Barrett Choir is an opportunity for students from all over the university, but primarily from Barrett, The Honors College, to participate in a high-quality choral ensemble. The group seeks to harness the creativity and intellect of honors students to create a collaborative ensemble that operates on a unique model of student-centered learning. The repertory, mostly chosen by the members, is highly varied, ranging from world music to pieces in the great choral tradition to newer music and popular music. There are normally two major concerts per semester, with some occasional smaller performances. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): minimum 45 hours |
| MUP | 460 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music major (bass, cello, viola, violin) who has passed audition |
| MUP | 461 | Marching and Concert Bands | Development of specific professional performing skills through staging of formations and drills for football games and other events (Marching Band); the development of specific professional performing skills for concert settings, with in-depth study of masterpieces of symphonic band literature (Concert Band). An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 465 | Music Theatre VI: Advanced Acting | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: MUP 370; Credit is allowed for only MUP 465 or 494 (Acting for Singers) |
| MUP | 470 | Music Theatre VII: Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: MUP 465; Credit is allowed for only MUP 470, 494 (Musical Theatre Dance) or 566 |
| MUP | 471 | Music Theatre: Workshops | Development of specific skills for musical-dramatic interpretation. Section 1 (Aria Preparation); Section 2 (Broadway I); Section 3 (Broadway II). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite: Music major |
| MUP | 472 | Music Theatre VIII | Development of specific skills and effective practices for musical theatre auditioning and development of specific skills for musical-dramatic interpretation. This is a performance-based class providing an opportunity to explore strong, clear acting choices for the musical theatre performer in a setting with a scene partner or scene partners, requiring the performance of songs, monologues, scenes, and choreography. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: MUP 470 |
| MUP | 476 | New Music Ensemble | In-depth study, synthesis, and performance of classical works written within the last twenty years for small ensemble and for instruments with electronics. Involves discussion and realization of advanced interpretive and technical concepts related to contemporary music. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |

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| MUP | 479 | Chamber Music Ensembles | Faculty-coached ensembles involving in-depth study and application of specialized, professional skills in performing with two or more players of like or unlike instruments and/or voice. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 481 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 482 | Piano Pedagogy | Continuation of MUP 481 (Piano). Problems and techniques of teaching intermediate to advanced piano students. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Music students who have passed audition |
| MUP | 486 | Jazz Band | Analysis, rehearsal and performance of new, traditional, and Latin literature for jazz ensembles. Development of advanced sight-reading and instrumental doubling skills. 4 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 487 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. May not be taken for audit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music students who have passed audition |
| MUP | 489 | Ethnomusicology Ensembles | Students apply indigenous music theories to actual practice, contextualized in background reading and listening, as they refine their ability to perform orally generated music and sometimes dance traditions. This course is open to non-music majors by audition or consent of instructor. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 495 | Performance | For candidates of a BM degree in which 1/2 recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Pre-requisites: Music students who have passed audition |
| MUP | 496 | Performance | For candidates of a BM degree in which a full recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Pre-requisites: Music students who have passed audition |
| MUP | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | Pre-requisites: Music students who have passed audition |
| MUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisites: Music students who have passed audition |
| MUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUP | 507 | Group Piano Practicum | Curricula, materials, and teaching techniques for group teaching at the university and community college levels. Observation/supervised teaching in group piano. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 508 | Studio Observation | Weekly observation of studio teaching by various piano faculty. Paper as final requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 509 | Jazz Keyboard Harmony | Emphasizes jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 510 | Jazz Keyboard Harmony | Continuation of emphasis on jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 511 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 517 | Advanced Improvisation | Improvisation techniques within the context of advanced jazz literature. Must be taken in sequence with MUP 518. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 521 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 527 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour per week. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 540 | Principles of Integrated Conducting | Score preparation and conducting techniques for instrumental music. Concentration on study of historical styles. Required of DMA students in Instrumental Music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: DMA Conducting major |

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| MUP | 541 | The Art Song | Seminar on solo song from its beginning to the present day. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 542 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. Graduate students especially need opportunities to hone their skills in a great variety of performance opportunities. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. The curriculum is designed to accommodate the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. Audition required during the first week of classes. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music students who have passed audition |
| MUP | 543 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MUP | 548 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 548 or 598 (Classical Style: Perf. & Anlys) |
| MUP | 549 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 549 or 598 (Unaccomp Bach Perf & Analysis) |
| MUP | 550 | Choral Union | Open to all students in the university and to interested singers in the community by audition. Preparation and performance of the larger choral works. 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 551 | Repertoire | Literature available for performance in all performing media. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 554 | Major Repertoire, Score Study, and Performance Practice | Conducting course comprising a survey of significant repertoire (encompassing, over multiple semesters, literature from choral, musical theater/opera, orchestral, and wind band genres); an introduction to historical performance practice; and a range of score study techniques. Conducting majors are required to enroll each semester (or as advised) and, subsequently, display a comprehensive historical knowledge of the repertoire and development of ensembles over the past 500 years, demonstrate command of standard performance practices with respect to each historical era, and exhibit a clear understanding of varied methods of score study. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: DMA Conducting major |
| MUP | 555 | Men's Chorus | Rehearsal and performance of music for mixed voices. 3 hours per week. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 557 | Women's Chorus | 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 560 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Graduate Music major who has passed audition |
| MUP | 561 | Marching and Concert Bands | Staging of formations and drills for football games and other events (fall); masterpieces of symphonic band literature (spring). Meets MWF. An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 565 | Acting for Singers | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 565 or 598 (Acting for Singers) |
| MUP | 566 | Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 566 or 598 (Musical Theatre: Dance) |
| MUP | 570 | Music Theatre: Techniques | Exercises and improvisations for the singing actor emphasizing body awareness, isolations, and freedom of the vocal and breath mechanisms. Section 1 (Interpretation); Section 2 (Expression); Section 3 (Movement for Singers). Each Section: 3 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUP | 571 | Music Theatre: Workshops | Development of specific skills for the musical-dramatic interpretation. Section 1 (Role Preparation); Section 2 (Styles); Section 3 (Opera Scenes); Section 4 (Musical Comedy); Section 5 (Revue Ensembles). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 573 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles), Section 2 (Chorus). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 574 | Music Theatre: Production | Introduces technical music theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 576 | New Music Ensemble | Rehearsal and performance of music written in the last 20 years. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 579 | Chamber Music Ensembles | String, brass, woodwind, percussion, keyboard, vocal, and mixed ensembles. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 581 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 585 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 586 | Jazz Band | Rehearsal and performance of new, traditional, and Latin literature for jazz bands. 4 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 587 | Ethnomusicology Ensembles | Performance learning experience for the music of various cultures of the world. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 588 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 596 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 597 | Solo Performance | See MUP 596. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 727 | Studio Instruction | Minimum contact of 1 hour per week. May be repeated for credit. Conducting students register for 2 semester hours; all other students register for 4 semester hours. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Doctoral Music major who has passed audition |
| MUP | 751 | Seminar in Piano Literature | In-depth study of selected topics related to the standard piano literature. Requires research paper, bibliography, class presentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 796 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | N | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUS | 100 | Fundamentals of Music Notation | Provides nonmusic majors with sufficient symbol literacy to begin work in the field of musical learning. Credit not applicable toward any music degree. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUS | 131 | Bach to Bebop | Develops an understanding of the repertoire for the various musical instruments and ensembles throughout the five eras being studied and discernment through listening different genres of music. For the lectures regarding instruments, introduces students to the respective repertoire for the instrument from c. 1700-present with special emphasis on how the use of the instrument developed throughout history or during each era. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for only MUS 131 or 194 (Performance: Bach to Bebop) |
| MUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 210 | The Arts Around Us | Develops the ability to think and create from an arts-rich perspective. In particular, focuses on the arts in the lives of children and youth, arts experiences for children and youth in the community, and one's personal experiences with the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 210 or 294 (The Arts Around Us) |
| MUS | 211 | Dance, Music and Meaning | Explores the fundamental nature of human experience across time and culture through the medium of dance and music using a variety of dance and musical materials including folk dance and music, popular dance and music, and such theatrical forms as ballet and modern dance and the music connected with them. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 211 or 294 (Dance, Music, and Meaning) |
| MUS | 212 | Music, Meaning and Imagination | Explores how music provides ways to make meaning of the world around us and music as a medium for creative thinking and doing. Develops understanding by trying on roles ranging from critics to creators in both individual and group projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 212 or 294 (Music, Meaning and Imagination) |

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| MUS | 213 | Critical Thinking in the Arts | Fosters critical thinking abilities in relationship to performing and visual arts. Students learn how to listen to music and view art analytically. Develops and applies knowledge of common elements (within and across art forms) such as form, texture, balance and contrast in order to enhance understanding both of arts processes and products. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 214 | Art, Music and Learning | Offers an integrated introduction to, and examination of, the core structural and formal elements of visual art and music in the context of contemporary experiences and learning process. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 215 | Children, Creativity, Arts | Interdisciplinary exploration of children's creative processes through critical analysis, hands-on participation and personal reflection. Specifically focuses on creative processes in the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 231 | Laughing to Music | Modern-day comedies like Spamalat, Avenue Q, and Glee are part of a comic tradition extending back to the Renaissance. Looks at funny in music from commedia dell'arte to the present. Studies works including the comedies of Mozart, Gilbert and Sullivan, the Marx Brothers, Monty Python, Mel Brooks and many others. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 231 or 294 (Laughing to Music) |
| MUS | 254 | Blues to Heavy Metal | Covers important musicians and trends from the 1930s through the 1970s. Topics include blues, rhythm and blues, rockabilly, doo wop, teen idols, girl groups, dance craze, surf, novelty, soul, Motown, British invasion, art rock, psychedelic rock, hard rock, heavy metal, and early '70s styles. Emphasizes musical instruments and stylistic traits with historical information provided as background. Features listening examples drawn from selected artists and bands including popular songs and rarities, and demonstrations using various musical instruments and techniques. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 254 or 354 (Blues to Heavy Metal) |
| MUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 340 | Music for the Concert Hall, Stage, and Screen | In-depth study of examples from Western art music. Emphasizes aural analysis and synthesis of historical data with musical phenomena. Critiques the canon and its limits in specific instances. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & H | Prerequisite(s): minimum 42 hours |
| MUS | 347 | Jazz in America | In-depth study, analysis and synthesis of examples from the jazz tradition. Includes the application of advanced aural analytic techniques to exemplary jazz musical works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: ENG 102, ENG 105 or ENG 108 with C or better |
| MUS | 354 | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): minimum 42 hours |
| MUS | 355 | American Music | In-depth study of current research topics in American music. Engages students in current scholarly debates. Charts the limits of current scholarly methodologies and historical research programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | Prerequisite(s): minimum 42 hours |
| MUS | 356 | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| MUS | 362 | Rap Music and Hip Hop Culture | Examines the history of rap music and hip hop culture from their origins to about 1995, including most, but not all, of the major artists from this period. Explores connections between rap music and other elements of hip hop culture, and challenges students to think critically about rap music and its place in society. Uses listening exercises, demonstrations, and conversations with artists to examine how rappers create meaning in their musical works. Drawing on secondary articles by rap critics and scholars, considers in detail such controversial subjects as censorship, sexism, obscenity, and race politics in America as they relate to rap music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: Minimum 42 hours; Credit is allowed for only MUS 354 (Hip Hop) or 362 |
| MUS | 371 | World Music | Provides an introduction to world music, including traditional and popular styles. Examines specific music genres from Africa, Asia, Europe, and the Americas and explores their historical development, cultural contexts, communicative functions, forms, styles, instruments and musical philosophies. Throughout the semester, considers the interrelationships among musical genres and other art forms (dance, theater, visual arts, and literature) and analyzes how these musics have intersected with the issues of race, class, gender, religion, ritual, politics, social movements and cultural identity. Students learn to hear and discuss significant stylistic elements of selected genres through listening assignments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only MUS 371 or 394 (World Music) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 410 | History of Women in Music | Surveys musical achievements of women as well as the historical contexts that shaped and defined their artistic development. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | |
| MUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUS | 240 | Listening to Music | Surveys the historical periods of music making in western civilization, the study of which will hopefully create within the student a listener with an appreciation for art music of many periods and provide more enjoyment in the process. Through lectures, presentations, readings, listening examples and video/DVDs, studies music identified as strong examples of the major periods, composers and compositions in the history of music. Students learn and adopt a minimum new language to help express the elements of music they experience and listen to and develop strategies for writing and communicating about what they hear and put words to how they respond to it. Because experiencing music performed live is an integral part of the learning process, students are required to attend concerts outside of class and submit critical reviews of what they hear. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| MUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 349 | Music in America | Current styles of American music including jazz, popular, and folk music. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| MUS | 354 | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 42 hours |
| MUS | 356 | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| MUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| MUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |

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| MUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| NAN | 505 | Nanoscience and Society | Integrates nanoscience and nanotechnology with potential societal issues involved in the students' NAN 593 Applied Projects. Coordinated by the faculty and research staff at the Center for Nanotechnology in Society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 506 | Innovation and IP Management | Intellectual Property (IP) Management in the context of innovation (research, regulations, manufacture, access to markets, and trade) with emphasis on strategies, public-private interface, licensing, and technology transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511, or PHY 481 |
| NAN | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| NAN | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| NAN | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| NAN | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| NAN | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, PHY552 or SEM 552 |
| NAN | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| NAN | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| NAN | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |
| NAN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| NAV | 101 | Introduction to Naval Science | Introduces the customs, traditions, missions and regulations of the Department of Defense, United States Navy and United States Marine Corps. Introductory course for the Naval Reserve Officer Training Corps (NROTC) by laying the basic foundation of knowledge about the Navy and Marine Corps required to progress through the NROTC program. Also provides the requisite knowledge to allow follow-on shipboard summer training to be safely and effectively conducted. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | |
| NAV | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NAV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| NAV | 301 | Naval Ship Systems I | Provides detailed knowledge of naval engineering systems and principles of ship construction. Topics covered include ship design, hydrodynamic forces, stability, conventional and nuclear propulsion, electrical theory and systems, hydraulics and ship control. Concepts of the theory and design of steam, gas turbine and diesel propulsion. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 301 or NAV 394 (Navy Ship Systems I - Engineering) |
| NAV | 303 | Evolution of Warfare | Provides marine option students with a basic understanding of the art, science and concepts of war from the beginning of recorded history to the present day. Addresses the interrelationships among technology, politics, culture and society to better understand warfare today and in the future. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours. Credit is allowed for only NAV 303 or NAV 394 Evolution of Warfare |
| NAV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 401 | Naval Operations and Seamanship | In-depth study of numerous aspects relating to the efficient and professional manner of U.S. Navy ships' operations. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 401 or NAV 494 (Naval Operations and Seamanship) |
| NAV | 403 | Amphibious Warfare | Focuses on the historical aspect of amphibious operations. Emphasizes how the development of this war fighting discipline played a key role throughout much of the early history of the Marine Corps. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 394 (Amphibious Warfare) or NAV 403 |
| NAV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NEU | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MCB 555 or NEU 555 |
| NEU | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| NEU | 558 | Neuroscience Journal Club | Small class emphasizing discussion, presentation by students, and written research papers. | N | SEM | Y | GNA | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| NEU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Interdisciplinary Graduate Program in Neuroscience PhD students |
| NEU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GRD | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 160 | Voluntary Action and Community Leadership | Introduction to voluntary behavior in American society for students interested in volunteerism, community service, and civic engagement. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |

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| NLM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| NLM | 220 | Introduction to Nonprofit Organizations | Introduces the nonprofit sector and its role in developing the cultural, economic, and social impact in U.S. society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 235 | Leadership and Ethics | Examines ethical questions faced by emerging leaders. Focuses on helping students develop emotional intelligence, current professional issues, and the refinement of a professional philosophy and comprehensive set of competences that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 300 | Fund Raising and Resource Development | Theory and practice of philanthropy, resource acquisition methods through ethical fund raising, and earned income approaches for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| NLM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142 or higher; NLM 160 (or PRM 120) with C or better; Minimum 2.50 GPA; Minimum 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| NLM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| NLM | 320 | Professional Development Seminar | Professional seminar featuring nonprofit executives; variable topics on leadership and management concerns. Forum for exchange between students and professionals. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: Nonprofit Leadership Alliance (formerly American Humanities) certification program student |
| NLM | 380 | Financial Management for Nonprofit Organizations | Instructs students about nonprofit financial, management, and social accounting; accounting issues specific to nonprofits; budgeting; reporting; and nonprofit analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Nonprofit Leadership and Management major students or Nonprofit Administration minor students or American Humanities Certificate students; NLM 220 with a C or better |
| NLM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| NLM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| NLM | 410 | Social Entrepreneurship | In-depth study of social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or NLM 210; NLM 220. Credit is allowed for only NLM 410 or NLM 562 |
| NLM | 420 | Nonprofit Leadership Alliance Institute | Nonprofit Leadership Alliance Institute for preparation of nonprofit professionals. Requires out-of-state conference. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-2 | | Pre-requisite: Nonprofit Leadership Alliance (formerly American Humanities) certification program students |
| NLM | 430 | Managing Nonprofit Organizations | Analyzes administrative structures, decision making, and program delivery within nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): NLM 220 and 300 with C or better; senior standing |
| NLM | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| NLM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |
| NLM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| NLM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |

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| NLM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NLM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | L | |
| NLM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 510 | The Nonprofit Sector | Provides grounding in scope, function and philosophical foundations of the nonprofit sector in American society, including civic engagement, service delivery, reproduction of values and entrepreneurship. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 520 | Financial and Resource Management | Baseline understanding of key and critical financial management issues and practices for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 525 | Fundraising and Resource Development | Examines fundraising and resource development in philanthropy from the perspective of the nonprofit practitioner. Also examines issues confronting nonprofit organizations related to fundraising and philanthropic purposes in society. Increases students' knowledge and understanding of charitable giving and fundraising—who gives to what, why, and how to raise funds for a cause. Examines a wide range of fundraising methods and tools. Focuses on critical thinking, reflection on practice, collaboration, discussion and writing. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 530 | Program Evaluation and Information Management | Develops skills in several areas, including evaluation, needs assessment, information and data collection, data management and analysis, computer applications, and report writing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 540 | Strategic Human Resources Management | Managing human resources in nonprofit organizations; practices and theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 545 | Volunteer Resource Management | Core topics in effective management of volunteers in carrying out the mission of organizations and ensuring volunteers have good experience with community organizations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only NLM 545 or 598 (Volunteer Resource Management) |
| NLM | 550 | Philanthropy | Examines the role of philanthropy and charitable giving in contemporary American society from perspectives of the nonprofit practitioner, the philanthropist and the general public. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 560 | Leadership and Ethics in the Nonprofit Sector | Examines leadership and ethical questions encountered by managers and leaders in the nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 562 | Social Entrepreneurship | Introduces social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 410 or 562 |
| NLM | 565 | Grant Writing Nonprofit Organizations | Provides practical, experiential instruction identifying grant makers, writing proposals, developing budgets, and evaluating grant proposals for the nonprofit sector. Students develop proposals based on actual, identified needs of their partner nonprofit organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only NLM 451, 565 or PRM 451 |
| NLM | 570 | International Non-Governmental Organizations | Increases knowledge and understanding of international non-governmental organizations by examining what these organizations do and how they operate in a cross-cultural context. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| NLM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NLM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| NLM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 605 | Nonprofits, Law and Society | Enhances the legal sensibilities of nonprofit leaders and engaged stakeholders. This necessitates critical in-depth understanding of: (1) legal needs common to all nonprofit organizations, regardless of mission or area of focus such as nonprofit corporation law, tax-exempt status, fiduciary duties and fundraising and lobbying ethics and parameters; (2) commonalities among nonprofit, for-profit and governmental enterprises operating within similar spheres of society, especially the importance of nonprofit organizations' compliance with laws generally applicable to specific subsectors such as contracts, labor and employment, volunteer and premises liability, and intellectual property; and (3) the overall importance and impact of legal structures on nonprofit organizations' abilities to successfully pursue their missions for the benefit of society. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 610 | Executive Leadership and Governance | Examines the multiplicity of roles for executives and board of directors in providing strategic leadership for nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 620 | Capstone: Integrative Seminar | Improves understanding of trends emerging within nonprofits such as leadership, resource development, and social responsibility. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite: Master of Nonprofit Studies major |
| NTR | 100 | Introductory Nutrition | Basic concepts of human nutrition. Recent controversies in nutrition and how food choices affect personal health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 100 or 241 |
| NTR | 142 | Applied Food Principles | Applied scientific principles of food preparation and production. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Nutrition (Dietetics or Food and Nutrition Management or Food and Tourism Management or Human Nutrition or Nutrition Communication) major OR Food and Nutrition Management minor OR Child Nutrition certificate |
| NTR | 150 | Introduction to the Professions in Nutrition and Dietetics | Introduces the professions of nutrition and dietetics; their history, practice, and future; credentials, ethics, and standards of practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| NTR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 241 | Human Nutrition | Principles of human nutrition. Emphasizes nutrient metabolism and the relationships between diet and disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: CHM 101 or 113 |
| NTR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 300 | Computer Applications in Nutrition | Introduces nutrition and food software, including dietary assessment and analysis, food inventory and control, and telecommunications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: NTR 100 or 241 |
| NTR | 320 | History of Human Nutrition | Origins of human nutrition; evolving theories of nutrition and disease; historical role of nutrition in social, military, cultural events. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 340 | Applications in Human Nutrition | Applies nutrient metabolism through case studies and product evaluations; special topics in human nutrition. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BIO 201; NTR 241 |
| NTR | 341 | Medical Nutrition Therapy I | First in a three-course sequence in medical nutrition therapy. Introduces the study of nutritional therapy of disease and evidence-based practice in prevention and nutritional management of diseases. Nutrition care planning for chronic diseases is taught via a variety of methods including case studies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |

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| NTR | 343 | Food Service Purchasing | Introduces purchasing systems, bid processes, receiving and storage procedures, and regulatory agencies involved in the food service industry. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or 241 |
| NTR | 344 | Nutrition Management and Leadership | Organization, administration, management and leadership in the nutrition field within healthcare, food service and other institutions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Prerequisite(s): NTR 100 or NTR 241 |
| NTR | 345 | Development of Healthy Cuisines | Principles and applications of nutrition, food selection, food preparation and mindful eating in the development of healthy cuisine for wellness, prevention and disease states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 348 | Cultural Aspects of Food | Origins, development, and diversity of food preferences and dietary habits; food patterns and attitudes of global populations and U.S. immigrants. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C & G | Pre-requisites: NTR 100 or 241 |
| NTR | 350 | Nutrition Counseling | Counseling techniques in nutrition; interpersonal and communication skills in clinical and community sites; nutrition education for individuals and populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 341 with C or better or NTR 345 |
| NTR | 351 | Nutrition and Health Communications | Approaches of nutrition and health communications; development of nutrition and health communication materials for selected target audiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisites: NTR 100 or 241 |
| NTR | 353 | Perspectives on the Western Diet: Food, Health and Sustainability | Hybrid course covering political, ethical, social and cultural issues inherent in the U.S. food system. Topics include examination of U.S. food guidance; the food system and food environment; the history of food and farm policy; food security and aspects of sustainability in relation to food system impacts on the health of humans, society and the environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only NTR 353 or NTR 394 (The Western Diet: Food, Health, & Sustainability) or SOS 353 |
| NTR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 400 | Preprofessional Preparation in Dietetics | Applies academic knowledge in field practicum; aspects of professional development. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Nutrition/Dietetics students; Senior status; NTR 341 with C or better; NTR 440, 441 or 444 with C or better |
| NTR | 401 | Field Experience in Food and Nutrition | Applies academic knowledge in food service management to field practicum; develops practical skills in planning, purchasing, production, management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Food and Nutrition management, Nutrition Communication, or Human Nutrition students; Senior standing; Pre/Co-requisites: NTR 351, 343 or 444 |
| NTR | 440 | Advanced Human Nutrition I | Metabolic reactions and interrelationships of vitamins, minerals, and water. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202 with C or better; NTR 241 with C or better; NTR 340 with C or better; Credit is allowed for only NTR 440 or 540 |
| NTR | 441 | Advanced Human Nutrition II | Metabolic reactions and interrelationships of carbohydrate, lipid, and protein. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BCH 361 with C or better; BIO 202; NTR 241; Credit is allowed for only NTR 441 or 541 |
| NTR | 442 | Experimental Functional Foods | Food product development techniques, food evaluation and testing, and investigation of current research into food composition. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: CHM 101 or CHM 113; NTR 142; NTR 100 or NTR 241 |
| NTR | 444 | Medical Nutrition Therapy II | Second in a three-course sequence in medical nutrition therapy. Covers the principles of medical nutrition therapy for prevention and treatment of disease and promotion of health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): BIO 202; NTR 341 with C or better; Credit is allowed for only NTR 444 or NTR 544 |
| NTR | 445 | Management of Food Service Systems | Standardized methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or NTR 241; NTR 142; NTR 343; Credit is allowed for only NTR 445 or 545 |
| NTR | 446 | Medical Nutrition Therapy III | Third in a three-course sequence in medical nutrition therapy. Content includes hands-on assessment techniques, evaluation and interpretation of laboratory data, and nutrition support with relation to disease process and progression. Nutrition assessment is taught via a variety of methods including case studies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 444 with C or better; Pre/Co-requisites: BCH 361; Credit is allowed for only NTR 446 or 546 |
| NTR | 448 | Community Nutrition | Food-related behaviors; organization and delivery of nutrition services; program design, implementation, and evaluation strategies; nutrition assessment of populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 448 or 548 |
| NTR | 450 | Nutrition in the Life Cycle | Nutritional needs and problems in pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 450 or 550 |
| NTR | 453 | Nutrition and the Media | Examines the promotion of nutrition ideas and concepts through media. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 453 or 494 (Nutrition and the Media) |
| NTR | 455 | Retail Food Service Operations | Development, evaluation and management of retail food service operations; legal and ethical issues in food and beverage management. Capstone course for food management degrees. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 (or 241); Junior standing |
| NTR | 457 | Sports Nutrition | Nutritional needs of recreational and elite athletes; energy balance; nutrient metabolism during activity; fluid-electrolyte regulation; evaluation of ergogenic supplements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; NTR 241 |
| NTR | 460 | Nutrition Entrepreneurship | Exploration of entrepreneurial opportunities in nutrition, food service, wellness and health communications. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 460 or 494 (Nutrition Entrepreneurship) |
| NTR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| NTR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NTR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |

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| NTR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |
| NTR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| NTR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 501 | Research Methods in Nutrition II | Reviews survey, focus group, and epidemiologic research; develops questionnaires; analyzes large data sets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 503 | Designing Health Behavior Change Interventions | Project-based course focuses on the process of health behavior change interventions using design process and behavioral science. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only NTR 503 or 598 (Designing Health Behavior Change Interventions) |
| NTR | 523 | Vegetarian Nutrition | Health benefits, nutritional characteristics, potential risks of vegetarian diets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 525 | Complementary Nutrition | Critical review of functional foods, phytochemicals, nutrient supplements in health promotion. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 527 | Policies, Environment, and Obesity Prevention | Enhances students' understanding of the role policies and environments play in health promotion and disease prevention with a special focus on obesity prevention. Looks at a variety of examples to see how policies and environments related to food, nutrition and physical activity affect individual and community health. Also explores how "non-health" policies can be used as an effective tool to promote healthy behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 529 | Pediatric Nutrition | Critical review of pediatric disease states and current nutritional therapies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 530 | Techniques of Health Coaching | Health coaching techniques and skills for medical, allied health and health promotion professionals. The content illustrates the theory, principles and practices of evidence-based coaching psychology. Aligns with the training programs affiliated with Wellcoaches® (endorsed by the American College of Sports Medicine). Designed in three parts: (1) building of core coaching skills; (2) establishing generative moments with clients; and (3) developing coaching presence and positive psychology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSC 440 or NTR 530 |
| NTR | 532 | Endocrine Pathophysiology and Nutrition | Explores the etiology of various endocrine pathophysiological conditions. Throughout the course, students learn the etiology of common conditions and are responsible for finding and presenting evidence for nutrition-based treatments for these conditions. At the conclusion of the course, students gain an appreciation and understanding of current research in nutrition-based approaches to treat endocrine disorders. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 533 | Ethics and Policy of American Diets | Political and ethical issues inherent in the U.S. food system. Topics include food and agricultural policy, government dietary recommendations and regulations, food environment, current issues in food politics, ethical questions of food choice, issues of obesity and food security, sustainability, and investigation of how and why Americans eat the way they do. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 535 | Nutrigenomics | Provides a sound foundation for promoting personalized nutrition by integrating and applying molecular nutrition and nutritional biochemistry to clinical settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BCH 361; BCH 367; NTR 440 or 441 |
| NTR | 537 | Evidenced-Based Nutrition | Reviews current evidence of the role of diet on disease prevention, development, and management. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 539 | Global nutrition | Provides an overview of global nutrition issues, including the epidemiology, etiology, sociocultural and economic context, and program and policy responses to nutrition-related topics. Areas to be covered include childhood malnutrition, growth stunting, micronutrient deficiencies, parasites and nutrition, sanitation, and obesity and chronic disease incidence in developing countries. Course is participatory; students engage in a series of class activities, discussions, and presentations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| NTR | 540 | Advanced Micronutrient Metabolism | Metabolism of vitamins and minerals, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 440 or 540 |
| NTR | 541 | Advanced Macronutrient Metabolism | Metabolism of protein, fat, and carbohydrate, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 441 or 541 |
| NTR | 544 | Therapeutic Nutrition | Current theories of the nutritional prevention or treatment of various diseases. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 444 or 544 |
| NTR | 545 | Management of Institutional Food Service Systems | Standardizes methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. May require field trips. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 445 or 545 |
| NTR | 546 | Assessment Techniques in Nutrition | Clinical and biochemical evaluation of nutritional status. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 446 or 546 |

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| NTR | 548 | Advanced Community Nutrition | Planning, development, implementation, and evaluation of community nutrition programs, including the process of grant applications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 448 or 548 |
| NTR | 550 | Advanced Nutrition in the Life Cycle | In-depth review of metabolic characteristics and nutritional needs during pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only NTR 450 or NTR 550 |
| NTR | 551 | Geriatric Nutrition | Explores the impact of nutrition on the aging process and how the aging process influences nutritional needs. Examines the physiology, demographics and economics of aging as well as issues such as end-of-life care. Addresses health promotion, disease prevention and disease management within the context of geriatric nutrition. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 553 | Nutrition and Cardiovascular Disease | Reviews current evidence of the role of diet on cardiovascular disease prevention, development and management. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): NTR 541. Credit is allowed for only NTR 553 or NTR 598 (Nutrition and Cardiovascular Disease) or NTR 537 (Cardiovascular Nutrition) |
| NTR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 310 | Nursing Concepts | Theoretical concepts related to health integrity focusing on the individual client across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BSN Nursing major in clinical program |
| NUR | 311 | Pharmacology | Applications of pharmacologic interventions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 312 | Psychomotor Skills for Professional Nursing Practice | Theoretical foundation for application of psychomotor nursing skills to professional nursing practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): Nursing major in clinical program. Credit is allowed for only NUR 312 or NUR 394 |
| NUR | 313 | Nursing Concepts for Adult Health | Nursing concepts related to selected alterations in health with focus on adult populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; NUR 320 with Y passing grade; Corequisite(s): NUR 323; Credit is allowed for only NUR 313 or NUR 394 (Nursing Concepts for Adult Health) |
| NUR | 315 | Nursing Research and Application to Practice | Provides scientific and clinical inquiry and research methodology along with concepts needed for integration of evidence into practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Prerequisite(s): Traditional BSN or Post Baccalaureate BSN: NUR 330 with C or better. RN/BSN: TWC 361 with C or better; NUR 391 with C or better |

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| NUR | 316 | Nursing Concepts for Psychiatric/Mental Health | Theoretical concepts related to select psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families, and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 with C or better if completed; NUR 311 with C or better if completed; NUR 330 with C or better if completed |
| NUR | 317 | Nursing Concepts for Psychiatric/Mental Health Nursing | Theoretical concepts related to select and/or prevalent psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): NUR 311; NUR 330; NUR 356; NUR 366; Corequisite(s): NUR 367; Credit is allowed for only NUR 317 or NUR 494 (Nursing Theory for Psychiatric Mental Health) |
| NUR | 320 | Nursing Practice | Integrates knowledge and attitudes from theory into the nursing care of adults in a variety of health care settings. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Nursing major in clinical program; Corequisite(s): NUR 310; NUR 311; NUR 312; NUR 330 |
| NUR | 323 | Nursing Practice Adult Health | Applies nursing process with selected alterations in health with focus on adult populations in the acute care setting. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; NUR 320 or NUR 484 (Nursing Practice) with Y passing grade if completed; Corequisite(s): NUR 313 or NUR 394 (Nursing Concepts Adult Health) |
| NUR | 324 | Nursing Practice: Psychiatric/Mental Health | Application of nursing process, critical thinking, clinical decision making with individuals, families, and groups experiencing acute/chronic alterations in mental health and/or psychiatric disorders. | N | SEM | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; Corequisite(s): NUR 316; Credit is allowed for only NUR 324 or NUR 484 (Nursing Practice: Psychiatric/Mental Health) |
| NUR | 330 | Professional Nurse Attributes | Professional nursing roles and responsibilities. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisites: Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 356 | Nursing Theory I | Focuses on the knowledge and skills essential to maintaining the health and wellness of clients across the lifespan and the concepts related to selected alterations in health in the adult population. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Prerequisite(s): Nursing major in clinical program or postbaccalaureate Clinical Nursing Program major; Pre- or corequisite(s): NUR 311 |
| NUR | 366 | Nursing Practice I Post Baccalaureate | Applies knowledge and skills essential to maintaining health and wellness in clients across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 6 | | Pre-requisite:Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major. Pre- or corequisite(s): NUR 356 |
| NUR | 367 | Nursing Practice: Psychiatric/Mental Health | Applies nursing process, critical thinking, clinical decision-making with individuals, families, and groups experiencing acute and/or chronic alterations in mental health and/or psychiatric disorders. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed |
| NUR | 384 | Gerontological Nursing | Focuses on optimizing the health of older adults and the management geriatric syndromes and chronic conditions. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre- or corequisite(s): NUR 330 with C or better if completed |
| NUR | 391 | Professional Nursing Theory | Analyzes the multiple dimensions of contemporary professional nursing. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | L | Prerequisite(s): ENG 101 with C or better; ENG 102 with C or better; Corequisite(s): TWC 361 |
| NUR | 392 | Health Promotion Across the Life Span | Examines concepts and theories involved in health promotion across the lifespan and their application for nurses. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 |
| NUR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 410 | Nursing Concepts for Community and Public Health | Examines concepts related to health promotion, disease prevention, and health maintenance within the global community. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and 315 and 316 all with C or better if completed; NUR 323 and 324 with Y grade if completed; Corequisite(s): NUR 420 or 484 (Nur Pract: Comm/Pub Hlth); Credit allowed for only NUR 410 or 494 (Nur Concepts Comm & Pub Hlth) |
| NUR | 411 | Nursing Concepts for Child bearing and Pediatric Clients | Concepts related to care of individuals and families within the childbearing and pedtric populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and 315 and 316 all with C or better if completed; NUR 323 and 324 with Y passing grade if completed; Corequisite(s): NUR 421; Credit is allowed for only NUR 411 or 494 (Nursing Concepts Childbearing Individ & Families) |
| NUR | 412 | Nursing Concepts for Pediatric Patients and their Families | Examines essential concepts related to the nursing care of pediatric patients and their families. Provides a nursing care approach for the pediatric patient and family across the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y passing grade if completed; Corequisite(s): NUR 422; Credit is allowed for only NUR 412 or NUR 394 (Nursing Concepts: Pediatrics) |
| NUR | 413 | Nursing for Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 423 |
| NUR | 415 | Nursing Concepts for Childbearing Family | Examines the care of childbearing clients and their families. Embedded content focuses on providing care to clients along the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed |
| NUR | 416 | Nursing Concepts: Community/Public Health | Examines selected concepts, theories, and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing locally and globally. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 315 and NUR 415 and NUR 417 all with C or better if completed; NUR 475 and NUR 477 with Y grade if completed; Corequisite(s): NUR 476 |
| NUR | 417 | Nursing Concepts: Pediatric Clients | Concepts related to care of individuals and families within pediatric populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed; Corequisite(s): NUR 477 |
| NUR | 418 | Nursing Concepts: Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed; Credit is allowed for only NUR 418 or NUR 478 |
| NUR | 419 | Leading & Managing Nursing in Organizational Systems | Analyzes selected concepts and theories related to leading and managing nursing in organizational systems. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 315 and NUR 415 and NUR 417 all with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 479 |

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| NUR | 420 | Nursing Practice: Community/Public Health | Applies community/public health nursing concepts in the delivery of primary, secondary, and tertiary care in a variety of community settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; Corequisite(s): NUR 410; Credit is allowed for only NUR 420 or NUR 484 (Nursing Practice: Community and Public Health) |
| NUR | 421 | Nursing Practice: Child Bearing/Family Nursing | Applies nursing care concepts related to the child-bearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y grade if completed; Corequisite(s): NUR 411; Credit is allowed for only NUR 421 or NUR 484 (Nursing Practice: Childbearing Clients) |
| NUR | 422 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y passing grade if completed; Corequisite(s): NUR 412; Credit is allowed for only NUR 422 or NUR 484 (Nursing Practice: Pediatrics) |
| NUR | 423 | Nursing Practice: Complex Care & Clinical Immersion | Students perform nursing practice in a variety of clinical settings, laboratory and simulated patient care environments. Students provide nursing care to patients who are physiologically unstable in advanced medical-surgical, and critical care clinical environments. Students perform advanced psychomotor skills in the clinical, laboratory and simulation environments. Students also complete a clinical immersion experience in a selected clinical setting. During the clinical immersion experience, students have the opportunity to apply leadership and management principles, and work in interprofessional healthcare teams to provide nursing care to clients experiencing health alterations across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 413 |
| NUR | 430 | Professional Nurse Attributes: Leadership and Management | Applications of theories and concepts of organizations, management, and leadership with focus on nursing management and leadership in healthcare organizations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 431 |
| NUR | 431 | Professional Nurse Attributes Innovative Professional | Focuses on the process of transition to the professional nursing role, and the gathering, interpretation, and evaluation of evidence that serves as a basis for improving client outcomes and professional satisfaction. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Pre- or corequisite(s): NUR 315 with C or better if completed; NUR 330 with C or better if completed |
| NUR | 440 | Community and Public Health Nursing in the United States | Examines selected concepts, theories and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing in the United States. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 391; NUR 315; TWC 361 with C or better |
| NUR | 444 | Innovation in Nursing | Examines the role and behaviors of an innovator in the nursing profession. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 with C or better |
| NUR | 445 | Nursing Management in Health Care | Examines selected theories and concepts of organizational behavior and the management of people and resources. Focuses on the application of selected management theories and concepts to nursing practice and healthcare systems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, NUR 391, TWC 361 with C or better |
| NUR | 460 | The Art of Nursing | Explores the aesthetic, ethical, and personal patterns of knowing in nursing for the practicing RN. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | HU | Pre-requisites: NUR 391; NUR315; TWC 361 with C or better |
| NUR | 464 | Capstone: The Synthesis of Professional Nursing | Synthesizes theories and concepts for professional nursing practice with a focus on role transition. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BIO 202; CHM 101; MAT 142; MIC 205; NUR 392; NUR 440; NUR 444; NUR 445; NUR 460; NUR 495; PGS 101 (or CDE 232) with C or better |
| NUR | 475 | Nursing Practicum: Care of the Childbearing Family | Applies nursing care concepts related to the childbearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 and NUR 367 with Y passing grade if completed; Corequisite(s): NUR 315; NUR 415 |
| NUR | 476 | Nursing Practice: Community and Public Health | Applies community and public health nursing concepts in the delivery of primary, secondary, and tertiary prevention from a population-centered perspective. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y grade if completed; Corequisite(s): NUR 416 |
| NUR | 477 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 and NUR 367 with Y passing grade if completed; Corequisite(s): NUR 315; NUR 417 |
| NUR | 478 | Nursing Practice: Complex Care | Applies advanced psychomotor and leadership skills, nursing care delivery management, and interprofessional referral and collaboration for clients experiencing health alterations across the lifespan in advanced care settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 418 |
| NUR | 479 | Nursing Practice: Clinical Immersion | Builds on the knowledge and skills obtained in the nursing curriculum and integrates the curriculum concepts in varied and diverse practice settings. Supports the student's transition into the role of the professional registered nurse. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 419 |
| NUR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |
| NUR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NUR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| NUR | 495 | Public and Global Health in Nursing | Analyzes public health concepts, theories, and practice with a focus on the health of all clients in a global environment. Includes core public health functions, domestic and international health care delivery systems, public health and health policy, conceptual and scientific frameworks for community/public health nursing practice, epidemiology, and global health issues. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, 391, and TWC 361 with C or better |
| NUR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |
| NUR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-7 | L | Pre-requisites: Upper Division Nursing Program students |
| NUR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| NUR | 501 | Individual and Innovation Leadership in Advanced Nursing Practice | Examines the role and behaviors of an innovator in an advanced nursing practice role. Explores the skills required to create a compelling vision to influence others through innovation and ethical leadership. Examines and correlates different situational challenges utilizing principles of complexity and emotional intelligence to advance innovation in advanced nursing practice roles. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS or Nursing Education MS or Nursing (Patient Safety and Health Care Quality) MS |
| NUR | 509 | Clinical Prevention and Population Health Practicum | Preceptored practicum appropriate to master's level nursing practice and roles within the context of team-based interprofessional clinical prevention and population healthcare and/or services. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s) with B- or better: DNP 604; 605; 608; 633 |
| NUR | 510 | Foundations of Care Coordination Practice | Focuses on the theoretical concepts of care coordination and case management, including current models, intervention components, evaluation methods and financing. Provides the foundation for understanding care coordination and the roles nurses have played in the evolution and implementation of the care coordination models. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS degree or certificate program |
| NUR | 511 | Concepts of Care Coordination and the Nurse's Role | Focuses on how nurses make care coordination visible in nursing practice and make a difference in cost-efficiency, quality and safety outcomes. Prepares nurses to advance care coordination at the unit, organizational or systems levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 510 with B- or better if completed |
| NUR | 512 | Improving Quality and Safety Outcomes Through Effective Care Coordination | Focuses on the nurse's role in care coordination, and how care coordination programs are used to provide cost-effective and patient-centered care, improve quality and safety outcomes for patients and families, and use health information technology to advance the goals of care coordination. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS degree or certificate program |
| NUR | 513 | Interprofessional Collaborative Practice and Transforming Health Care Policy | Examines the nurse's role in communicating, collaborating and leading interprofessional teams to advance innovative care coordination models. Prepares nurses to influencing health policy through care coordination research and leadership. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s) with B- or better: NUR 510; 511 |
| NUR | 519 | Role-Focused Practicum: Care Coordination | This mentored practicum provides the learner with opportunities to apply care coordination (CC) concepts and principles in a practice environment at the unit, organization or systems levels. Tailored to the prior experiences and level of the learner and may include working in intra- and interprofessional teams to address care coordination initiatives at the unit, organizational or systems levels. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 510 with B- or better; NUR 511 with B- or better; NUR 512 with B- or better; NUR 513 with B- or better |
| NUR | 520 | Patient Safety and Health Care Quality Principles, Assessment and Methods | Focuses on the application of core principles of patient safety and health care quality to patients. Explores current and historical factors that contribute to quality health care outcomes. Examines the influence of financial, legal and regulatory factors on patient safety and health care quality. Applies various theories, concepts and tools to promote patient safety and health care quality. Describes the principles of just culture and the relationship to analyzing errors. Discusses the nurse's role in advancing patient safety and health care quality. Infuses the Quality Safety Education in Nursing (QSEN) competencies into course activities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing (Patient Safety and Health Care Quality) MS major |
| NUR | 521 | Health Care Evidence, Informatics and Analysis | Focuses on applying information technology and research methodology to safety and quality initiatives. Students learn the role of technology related to select human factors engineering concepts and related clinical application (e.g., medication administration, clinical decision making). Focuses on determination of outcome measures related to evidence-based practice (EBP) and quality improvement (QI). Discusses survey methods including construction, data collection methods, and data analysis. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better |

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| NUR | 522 | Designing Systems for Patient Safety and Health Care Quality | Focuses on the design, implementation, evaluation and sustainability of patient safety and health care quality initiatives. Uses innovation and change theories, as well as high reliability and just culture principles, to support data collection, analysis and reporting within complex health care systems. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better; NUR 521 with B- or better |
| NUR | 523 | Interprofessional Collaboration for Improving Patient Safety and Health Care Quality Outcomes | Focuses on developing skills and strategies for interprofessional collaboration, team leadership, communication, and project management to improve patient safety and health care quality outcomes in an interprofessional health-related setting. Theory and evidence-based strategy for team building, maintenance and conflict resolution for improved team-based practice and performance. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better |
| NUR | 529 | Role-Focused Practicum: Patient Safety and Health Care Quality | Mentored practicum provides opportunities to apply patient safety and health care quality (PSHQ) concepts and principles in a practice environment at the unit, organization or systems levels. Tailored to the prior experiences and level of the learner. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better; NUR 521 with B- or better; NUR 522 with B- or better; NUR 523 with B- or better |
| NUR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing student |
| NUR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: Nursing Graduate student |
| NUR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Nursing Graduate student |
| NUR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 601 | Scientific Role Development I: Engaging and Committing | First in a series that focuses on the development of a scientific role identity in nursing and health care innovation, including the areas of education, policy and research. Analyzes current trends in the development of innovative scientists and leadership characteristics needed for future roles. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Health Care Innovation PhD student |
| NUR | 602 | State of the Science in Nursing and Healthcare Innovation | Focuses on research synthesis and critiques of the scientific literature as a basis for knowledge generation related to a focal area of research interest. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing & Healthcare Innovation PhD student; Corequisite(s): NUR 605 |
| NUR | 603 | Social and Contextual Issues in Nursing and Healthcare | Analyzes nursing practice and the healthcare system for an identified population using social-ecological approaches. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 604 | Philosophy of Science Perspectives in Nursing and Healthcare Innovation | Analyzes the history and philosophy of science as a basis for knowledge and academic scholarship in nursing and healthcare innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 605 | Theory Analysis | Examines theoretical perspectives and approaches guiding research in nursing and healthcare innovation across the lifespan. Includes the historical evaluation, social contextual factors, implicit assumptions, and bias that influence nursing and healthcare innovation knowledge generation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 606 | Scientific Role Development II: Validating and Demonstrating | Second in a series that focuses on the development of a scientific role identity in nursing and health care innovation, including the areas of education, policy and research. Posits the knowledge, skills and resources needed to expand one's career as an educator and scientist in a health-related leadership role in the context of a future health care environment. Explores strategies for progressive and creative approaches in preparing leaders for innovative change in education, research and health care policy affecting healthcare delivery. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Health Care Innovation PhD student |
| NUR | 608 | Qualitative Research Design and Methods | Explores and critiques selected qualitative research approaches. Includes fieldwork exercises as an integral part of course expectations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |

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| NUR | 609 | Quantitative Research Design and Methods | Examines multiple research approaches in clinical and health policy research from a quantitative perspective. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 612 | Advanced Analysis of Variance: Design and Analysis of Experiment | Introduces theory, methods, and practice of analysis of variance. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 613 | Principles of Regression and Correlation | Introduces theory, methods, and practice of regression analysis. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 614 | Design and Implementation of Theory-Based Interventions | Focuses on the knowledge related to advanced methods for intervention research. Examines methodological, ethical, and practical issues in the design and implementation of theory-based intervention studies. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 615 | Qualitative Data Management Seminar | Qualitative research methods applied to thesis, dissertation or qualitative research reports, focusing on data reduction, analysis, interpretation, credibility, ethics and dissemination. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): COE 503 or CRJ 613 or EDP 503 or NUR 608 or PAF 610 |
| NUR | 616 | Community-Based Participatory Research | Overview of Community-Based Participatory Research (CBPR). Familiarizes participants with key historical underpinnings of CBPR, principles of CBPR practice, as well as methodological CBPR considerations in building community partnerships, issue analysis, research planning, data gathering and data sharing. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only NUR 616 or NUR 691 (Community-Based Research) |
| NUR | 617 | Foundational Concepts in Science and Statistics | Provides basic skills necessary for health-related research specifically geared toward (1) understanding concepts of widely used statistical methods with examples from health care; (2) ethical knowledge of human subjects research; and (3) processes of research including research design, interpretation and presentation of results and critiquing research articles. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): COE 502 or EDP 502 or EXW 501; Credit is allowed for only NUR 617 or NUR 691 (Foundational Concepts in Science and Statistics) |
| NUR | 618 | Advancing Research-Based Health Policy Through Leadership and Innovation Science | Integrative synthesis course in which students apply values and knowledge from previous PhD core courses in philosophy of science, theory analysis, state of the science, quantitative and qualitative methods, and the art and science of teaching. Examines the role of scholars and scientists in health policy reform. Using tools from leadership and innovation science, advances strategies to accelerate the use of interprofessional research in policy decisions and advances the national agenda for improving health and the quality and affordability of health care. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 602, 603, 604, 605, and 609 |
| NUR | 628 | Research, Theory and Principles for Palliative Care in the Older Adult | Focuses on theory and research underlying end of life and palliative care for the older adult utilizing current practice guidelines and research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 629 | Research for Geriatric Practice | Gaining knowledge and skills in critical appraisal and synthesis of evidence to guide best practice in gerontology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only DNP 629 or NUR 629 |
| NUR | 630 | Mechanisms of Disparities | Analyzes and applies the complex issues underpinning culture and health disparities related to a specific health outcome to research with a selected cultural group. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Mechanisms of Culture), 598 (Mechanisms of Disparities) or 630 |
| NUR | 631 | Leveraging Culture in Intervention Development | Analyzes the complex issues underpinning the development of evidence-based interventions among various cultural groups. Also analyzes methods of leveraging culture to optimize the development, delivery, effect and evaluation of health interventions for various cultural groups. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: NUR 630 (or NUR 598 Mechanisms of Disparities); Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Leveraging Culture in Intervention Development) or 631 |
| NUR | 640 | Integrative Theories of Innovation in Healthcare | Analyzes cross-disciplinary theories of innovation for improving health and quality of healthcare. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: NUR 605; Credit is allowed for only NUR 691 (Integrative Theories of Innov) or NUR 640 |
| NUR | 641 | Theories of Emergent Leadership in Healthcare Innovation | Analyzes cross-disciplinary theories of leadership. Emphasizes leadership frameworks that describe, explain and predict the relationships among leadership and healthcare innovation and outcomes. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 640. Credit is allowed for only NUR 641 or 691 (Theories of Emergent Leadership in Healthcare Innovation) |
| NUR | 650 | Human Lactation in the Post-Modern World | In-depth exploration of the complex and multifaceted social, cultural and environmental contexts that affect the public health goal of improving successful breastfeeding during the first years of life. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only NUR 650 or 691 (Human Lactation in the Post Modern World) |
| NUR | 670 | Curriculum Development in Academic and Practice Settings | Includes analyses of historical, philosophical, societal, environmental, cultural, technological, and educational factors of curriculum development in academic and practice settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing (Nursing Education) MS or Graduate Certificate in Nursing Education; Pre- or corequisite(s): NUR 671 with B or better |
| NUR | 671 | Teaching in Academic and Practice Settings | Analyzes theories, issues, research related to teaching in nursing and educational leadership. Focuses on the process of teaching and learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program. |
| NUR | 672 | Design and Delivery of Mediated Instruction | Addresses instructional design issues, theory, and practices related to online and electronically mediated learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 673 | Producing and Evaluating Programs for Academic and Practice Settings | Critical examination of standards, regulatory environment, administrative systems, leadership requirements, technological infrastructure, human factors, future trends regarding mediated education planning, production, and evaluation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |

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| NUR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 692 | Research | | N | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | |
| OBS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| OBS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OGL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| OGL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 200 | Introduction to Organizational Leadership | Presents a broad survey of leadership theory and research as currently practiced in formal organizations. Includes examination of leadership models, power and influence, team leadership, cross-cultural leadership, strategic styles of interaction, ethics, leadership skill development, decision-making techniques and effective goal implementation. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| OGL | 220 | Behavioral Dynamics in Organizations | Explores the different theories, strategies and skills that managers and subordinates need to develop to improve interpersonal relations. Primarily emphasizes skill areas in leadership, motivation, communication, group dynamics, organizational development, conflict resolution, political strategy, cross-cultural relations, ethical behavior, stress management and time management. Develops effective strategies for becoming effective managers, subordinates, peers and students. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| OGL | 240 | Introduction to Project Management | Offers insights into each step of the project management process through an examination of various theoretical approaches. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| OGL | 260 | Resource Allocation in Organizations | Introduces the decision-making framework of resource allocation within the broader context of basic business finance. Students learn that resource allocation decisions are regularly guided by fundamental principles in finance. Primarily focuses on business resources, resource management and allocation, accounting statements, profit and loss drivers, cash and profit statements, balance sheets, budgets and forecasts, management accounts and capital investment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; MAT 117 (or any course with General Studies MA designation) |
| OGL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 300 | Theory and Practice of Leadership | Presents an in-depth study of leadership theory and its practical application in formal organizations. Includes examination of the trait approach, situational approach, contingency theory, path-goal theory, leader-member exchange theory, transformational leadership, psychodynamic approach, and women and leadership. Emphasizes application of these theories in real-world case studies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): OGL 200; minimum 56 hours |
| OGL | 320 | Foundations of Project Management | Covers project management terminology, tools, best practices, theoretical approaches, the phases of project management and how they are applied developing a project plan and schedule, and other competencies needed to effectively manage projects. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 56 hours |
| OGL | 321 | Project Leadership, Strategy and Scope | Explores how executive management is responsible for conceiving, designing, implementing and managing the organization's overall objectives, culture, environment and processes as part of the project management process. Within this context, primarily focuses on understanding project management, aligning project management with the organization, project management oversight, projects as capital investments, globalization and resources optimization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): OGL 240 or OGL 320; minimum 56 hours |
| OGL | 322 | Project Time Management | Explores project scheduling and time management within the broader context of the planning effort. Students learn how important the determination of the timing and sequence of project activities is to the planning process--and ultimate project success. Primarily focuses on understanding bar charts, basic networks, the critical path network, precedence networks, resource allocation, schedule updating, schedule compression, scheduling and schedule risk management. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 earned hours |
| OGL | 323 | Project Cost Management | Concepts and complex processes of effective project cost management. Primarily focuses on project needs assessment, cost estimation, project cost control, project budgeting, cash flow management, financial management, value management, configuration management and supply chain management. Students also learn to appreciate the importance of integrating cost and value management processes. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 324 | Resources in Project Management | Major elements of project resource management as well as the broader context of this critical planning function. Students learn that sound resource management is an important part of developing a sustainable competitive advantage in the emerging global marketplace. Primarily focuses on operations and productivity, resources in project management, product design, process strategy, layout strategy, human resources and job design, supply chain, inventory management and scheduling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 326 | Project Procurement Management | Concepts and processes of procurement management. Primarily focuses on sourcing management, supplier selection, contracts and legal requirements, risk management, negotiation, project management, quality, supplier management and financial decisions. Effective procurement requires the use of good business practices capable of maximizing value to the organization through the acquisition of goods and services. Students learn that procurement professionals control the entire sourcing and acquisition process. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours. Credit is allowed for only BIS 350 or OGL 350 |
| OGL | 355 | Leading Organizational Innovation and Change | Process and theory of strategic management with primary emphasis on situation analysis, strategy formulation, strategy implementation and strategy evaluation. Covers the strategic management context, external analysis, internal analysis, functional and competitive strategies, international strategies, strategic entrepreneurship and nonprofit strategy. Students understand the process of analyzing situations, developing appropriate strategies, putting those strategies into action, and evaluating and changing those strategies as needed. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| OGL | 360 | Assessment of Leadership Effectiveness | Empirical analysis of leadership, a conceptual model of effective leadership, and a practical guide for developing the competencies and attributes most likely to produce effective leaders. Primarily focuses on leadership competencies, organizational fit, leadership strengths, fatal flaws, leadership teams, leadership development, improvement measurement and leadership follow through. Students learn to distinguish between leadership success and leadership effectiveness. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): MAT 117 (or any course with General Studies MA designation); OGL 200; minimum 56 hours |
| OGL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 421 | Project Risk Management | Philosophy, principles, practices and techniques for managing risk in projects. Covers risk identification, qualitative risk management, risk treatment, monitoring and review, project processes, risk allocation, environmental risk and quantification of project risk. Students learn that risk management assists project managers in setting priorities, allocating resources and implementing actions and processes that reduce the risk of the project not achieving its objectives. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 422 | Project Quality Management | Process and theory of total quality management with primary emphasis on the total quality approach, ethics and corporate responsibility, strategic alliances, quality culture, employee empowerment, leadership and change, team building, effective communication, and tools and techniques. Students understand how continual improvement of people, processes, products/services, and environments can enhance the process and outcomes of project management. Students have the opportunity to develop practical total quality management skills as they apply theory and practice to real-world cases. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| OGL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | |
| OGL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| OGL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| OMT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 343 | Occupational Safety and Ergonomics | Health and safety movement, accident theories and effects, OSHA standards and liability, safeguarding, hazards, workers' compensation, ergonomics, and safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| OMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 402 | Legal Issues for Technologists | American legal system and impact on technology management issues: contracts, torts, intellectual property, white collar crime, antitrust, environmental, and employment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |
| OMT | 405 | Forecasting and Evolution of Technology | History and evolutionary nature of selected technologies, issues in the management of emerging technologies, and methods of technological forecasting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |
| OMT | 430 | Ethical Issues in Technology | Topics in social responsibility for industrial technology and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student |
| OMT | 440 | Introduction to International Business | International business principles and operations, including partnerships, trade agreements, currency issues, international sales, and cultural differences between countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | Prerequisite(s): Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student, MGT 301, TMC 330 (TMC 346) |

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| OMT | 445 | Industrial Internship | Work experience assignment in industry commensurate with student's program. Specialized instruction by industry with university supervision. Pass/fail. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-10 | | Prerequisites: Fulton Polytechnic School undergraduate student; Minimum 2.25 GPA; minimum Junior standing |
| OMT | 452 | Industrial Human Resource Management | Concepts and practices of human resource management in a global industrial environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre requisite(s): Fulton Polytechnic School student |
| OMT | 480 | Organizational Effectiveness | Human aspects of supervisory behavior in the industrial setting and how they influence efficiency, morale, and organizational practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| OMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Pre-requisites: Minimum Junior standing; Minimum 2.25 GPA |
| OMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 502 | Financial Management | Examines corporate financial and managerial accounting systems, budgeting, and financial policy, using microcomputers to analyze, forecast, and report information. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 503 | Marketing Management | Modern methods and industrial case studies of planning, pricing, promoting, and distributing goods and services in the global marketplace. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 504 | Law and Ethics for Technical Professionals | Analyzes legal and ethical framework for making managerial decisions in the corporate environment of engineering- and technology-related industries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 520 | Strategic Management of Technology | Analyzes entrepreneurial dynamics and technology development, methods of research and development management, new technology implementation, and start-up organization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 540 | International Management | Practices and procedures for effective management of multinational business organizations, including partnerships, joint ownerships, and global subsidiaries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 548 | Statistical Methods for Research | Multivariate statistical techniques to analyze research data. Uses statistical software and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 549 | Research Techniques and Applications | Selection of research problems, analysis of literature, individual investigations, preparing reports, and proposal writing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 560 | Managerial Decision Making | Analyzes common decision-making biases and techniques to overcome them. Uses both subjective quantitative decision tools and computerized decision aids. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 570 | Advanced Project Management | Planning, organizing, coordinating, and controlling staff and project groups to accomplish the project objective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only OMT 570 or TMC 470 |
| OMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | OP4 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OPM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| OPM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |

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| OPM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| PAF | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 200 | Public Service and Policy in the 21st Century | Provides a broad introduction to the field of public service and leadership. Topics include an overview of management, policy, urban studies, and leadership in the public sector. Covers the history and development of the public sector, as well as how it serves contemporary society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 201 | Economics and Public Policy | Introduces the terminology and methods of analysis in microeconomics. In particular, examines the behavior of individual consumers and firms, with a focus on market failures and the role of government policy in correcting those failures. Applies microeconomic principles to the distribution of income, policies for eliminating poverty and discrimination, the problems of environmental pollution, and the impact of different market structures on economic activity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | |
| PAF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 300 | Public Management and Administration | Examines the context and role of the public manager and the development of the field of public administration. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 301 | Applied Statistics | Focuses on statistical techniques used in social science research. Applies concepts such as measures of central tendency and dispersion as well as statistical techniques, including the following: one-sample z and t tests, two-sample t tests, chi-square, and correlation. Goals include helping students understand the mathematical and statistical concepts presented and assisting them in using these concepts in everyday life and in the study of social sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | CS | Pre-requisites: MAT 142 or higher |
| PAF | 302 | Public Service Research Methods | The philosophy, scope, and methods of public sector research. Examines quantitative and qualitative research methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 301 with C or better |
| PAF | 311 | Leadership and Change | The leader's role in bringing about significant organizational and societal change with special attention to group and organizational behavior dynamics, establishing a vision, mobilizing and empowering individuals and groups, and assessing outcomes of the change process in a variety of settings. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours |
| PAF | 340 | Contemporary Policy Challenges | Develops conceptual, critical, and practical understanding of public policy, the policy process, and policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Minimum 30 hours |
| PAF | 350 | Introduction to Science & Technology Policy | Explores the variety of ways in which governments make policies, how the policies shape the development of science and technology and their applications, and how policy may be shaped to create better futures. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 30 hours |
| PAF | 360 | Introduction to Emergency Management | Emergency management theories. Comprehensive emergency management. Mitigation, preparedness, response, and recovery. Post-disasters and policy formation. Current FEMA all-hazards approach. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 363 | Computer Applications in Emergency Management | Explores specific computer programs that are currently in use for contingency planning, tracking chemical inventories, and response resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: MAT 142 |
| PAF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 400 | Senior Capstone Project | Teaches students to solve problems related to the public sector by applying theory, knowledge, and methods from previous courses to a hands-on project in the community. Seminars include guest speakers and discussions on professional development. Students work as individuals and as a team to prepare research papers and a professional report that is presented to the community. | N | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 200, 201, 301 (or 401), 302, 311 (or 411), 340, and 460 with C or better |
| PAF | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours; Credit is allowed for only PAF 410 or URB 410 |
| PAF | 420 | Public Leadership | Examines key concepts, models, and strategies for leading public and nonprofit organizations, emphasizing self-knowledge, skills, and abilities for effective leadership. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 421 | Leadership Capstone | Builds upon leadership courses in the Leadership and Ethics certificate program by applying concepts and examples from the readings as well as individual experiences. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 311 and 410; Credit is allowed for only PAF 421 or 494 (Leadership Capstone) |
| PAF | 424 | Comprehensive Emergency Management | Addresses theory and management techniques for emergency preparedness, including mitigation, preparedness, response, and recovery. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |

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| PAF | 425 | National Incident Management System (NIMS) | Covers concepts, terminology, players, compliance requirements, including doctrine of National Incident Management System per HSPD-5. Discussion of National Response Plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 460 | Public Service Ethics | Role, values, and issues of public management in democratic governance, citizen participation, power structures, and professional codes of conduct. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 461 | Homeland Security | In-depth analysis of policies, procedures, and organizational structure for effective homeland security program. Covers all hazard/all risk philosophy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only PAF 461 or 561 |
| PAF | 468 | Simulation and Exercising | Requirements, planning, conduct, and critique of exercises related to emergency planning. Emphasizes realism using moulage and props. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 469 | Terrorism Defense | Explores the background and evolution of terrorism. Presents specific tactics for preparation for and response to acts of terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ABS 598 (Terrorism Defense) or PAF 469 |
| PAF | 470 | Topics in Public Economics and Financial Management | Provides an analysis of public economic practices and problems in a federal system. Presents detailed descriptions, where appropriate, of significant institutions and applies modern economic theory to the ways that these institutions finance and deliver services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: ECN 212 or PAF 201 with C or better |
| PAF | 471 | Public Policy Analysis | Provides further study in the concepts, models, and operational methods used in public policy decisions and analysis. Enables students to develop higher skills needed for defining policy issues, identifying alternative solutions, and predicting the potential impact of policy alternatives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 301 and 340 with C or better |
| PAF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | | Prerequisite(s): Barrett Honors student |
| PAF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PAF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-3 | | |
| PAF | 501 | Public Service Research I | Philosophy, scope, and methods; public service research design, values, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Must have earned B or better or currently enrolled in PAF 401, POS 401, PSY 230 QBA 221, or SOC 390 AND course must be completed within 4 previous terms |
| PAF | 502 | Public Service Research II | Quantitative techniques including multivariate analysis, data analysis, decision making, and computer applications in public affairs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |
| PAF | 503 | Public Affairs | Development and context of American public administration and policy, role of administration in governance, and values and ethics in administration. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 504 | Microeconomics of Public Policy I | Provides key principles of microeconomics. Places particular emphasis on developing the analytic tools of economic reasoning and using these tools to examine policy interventions of interest to public managers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 505 | Public Policy Analysis | Institutional and formal analysis of policy processes, decision making, and problem solving; values, ethics, and the uses of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 504 with C or better |
| PAF | 506 | Public Budgeting and Finance | Legal, social, economic, political, institutional, and ethical foundations of governmental finance, budgets, and budgeting. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better |
| PAF | 507 | Public Human Resource Management | Personnel systems, behavior and management of people in public organizations, collective behavior, unionism, conflict management, motivation, productivity, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 508 | Organization Behavior | Theory and application in the management of organizational behavior with emphasis on leadership and the public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 509 | Public Affairs Capstone | Capstone application of core course knowledge, skills, and abilities required for public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 501, 502, 503, 504, 505, 506, 507 and 508 with C or better |
| PAF | 520 | Public Management | Management process in government and public agencies, with emphasis on the executive leadership within the public sector. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 523 | The City and County Manager | Manager's role and resources in the differing forms of administrative, legislative, and community sectors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 525 | Public Entrepreneurship | Explores entrepreneurship in the public sector from various angles, including small and large communities and nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 529 | Organization Change and Development | Explores the nature and management of change and development as a tool to achieve organizational goals; effecting planned change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PAF | 530 | Management of Urban Government | Administrative practices and behavior within the urban political administrative environment. Functional areas such as citizen participation, urban planning, urban transportation, and the conflicts between urban politics and administrative efficiency. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 531 | Community Conflict Resolution | Interdisciplinary approach to understanding the dynamics of community conflict. Strategic considerations in policy design and advocacy, potential reaction to conflict. Relevant models and research findings generated by both case studies and comparative methods. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 534 | Urban Services Infrastructure | Provides an overview of the network of services being provided in the urban environment by a variety of governmental and nongovernmental agencies. Discusses coordination, cooperation and overlap of services by local, special district, county, regional and state levels, alternate delivery methods including nonprofits, and the evolving relationship of these services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 540 | Adv Policy Analysis | Emphasizes the structure of policy problems, forecasting policy alternatives, optimizing resources, and reducing uncertainty in policy making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 505 with C or better |
| PAF | 541 | Program Evaluation | Various methodologies available for the evaluation of public policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |
| PAF | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy—especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| PAF | 546 | Environmental Policy and Management | Analyzes environmental policy and planning issues and principles related to the analysis and management of natural and urban/regional resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 547 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| PAF | 548 | Women/Politics/Public Policy | Explores how political philosophy, politics, and public policy affect and are affected by women. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 549 | Diversity Issues and Public Policy | Examines public policy issues concerning or affecting women, black, Latino, Asian, and American Indian communities, as well as those groups' impact on the policy process. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 550 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |
| PAF | 552 | Integrated Emergency Management | Theory and practice of comprehensive emergency management. Explores scope and function of Department of Homeland Security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 555 | Information Technology in Emergency Management | Provides theory and application of computer-based programs in emergency management and the use of various emergency modeling programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 560 | Community Resilience | Examines community resilience from a systems perspective, embracing governments, private, nonprofit and civic roles. Presents research, case studies, and strategies for policy planning and implementation. Provides an understanding of how community members respond to the need to prepare for, endure and recover from disasters and the ability to utilize multiple communication methods to help community members before, during and after these emergencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 561 | Interoperability for Emergency Managers | Enables understanding of the multiple technologies and skills utilized by emergency managers to enhance successful coordination and communication between all levels of emergency managers and responders during emergency mitigation, prevention, preparedness, response and recovery operations. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 554 |
| PAF | 564 | Political Economy | Classical and contemporary literature and historical development of governmental and economic arrangements, with special emphasis on the role of the state. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |

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| PAF | 565 | Theories and Practices of Democracy | Critically explores the wide range of ideas, issues, challenges, and promises related to democracy in theory and practice. Intended for all students interested in democratic leadership, public service, civic engagement, and participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 566 | Participatory Governance & Civic Engagement | Examines classic and current theoretical debates on participatory governance and civic engagement, discusses theoretical and practical implications, and analyzes different models of participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 570 | Microeconomics of Public Policy II | Provides the policy tools to solve economic problems such as market concentrations, market failures and externalities, and asymmetric information. Increasingly, government interventions are moving away from a command-and-control-style of direct provision of goods and services and toward a large menu of indirect approaches implemented through a complex system of third-party actors. Government intervention in private markets now entails loans and loan guarantees, grants-in-aid, contracts, vouchers, social and economic regulation, and many other policy tools. Each of these instruments involves vastly different behavioral distortions, policy technologies, political considerations and technical sophistication. Analyzes the economics of four policy interventions: grants, tax expenditures, social regulation and vouchers. Provides an overview of each tool (including its key design features) and combines economic theory with background information on how public policies actually operate. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better |
| PAF | 571 | Geographic Information Systems (GIS) and Analysis | Provides foundational information related to application of GIS technology to meet various needs within governmental operations, administration, and public policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 573 | Applied Econometrics | Applied treatment of the most important modern econometric methods used to evaluate public policies. Help students become savvy consumers of econometric methodology and develops the methodological skills necessary for implementing quantitative evaluations of public policies. Accordingly, course stresses critical thinking and creativity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 502 with C or better |
| PAF | 574 | Diversity, Ethics, and Leading Public Change | Focuses on leadership, ethics, and benefits and tensions of the multicultural city to develop leadership and multicultural competence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 579 | Public Policy Capstone | Integrative, client-based project course. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | L | |
| PAF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Pre-requisite: Doctoral student |
| PAF | 601 | Seminar: Pol Analysis & Eval | Normative and conceptual issues of policy formulation, implementation, and evaluation; methods of policy analysis and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 602 | Seminar: Foundations of Public Administration | Philosophy of science (including conduct of inquiry--epistemological and ontological foundations), historical development, and theoretical foundations of the field. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Doctoral PAF student |
| PAF | 603 | Advanced Economics for Public Administration and Public Policy | Theory of utility and demand, theory of the producer, organization, operation of product and factor markets, market equilibrium, regulation, risk and uncertainty, general equilibrium and welfare policy, market failure, public goods and taxation, and game theory. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better; doctoral major |
| PAF | 604 | Foundations of Public Administration II | Philosophy of science (including research design issues and alternative approaches) and contemporary public administration, including political, social, technological, and economic institutions involved in governance, exposure to research being conducted within department. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student, PAF 602 |

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| PAF | 610 | Advanced Qualitative Methods for Public Affairs Research | Explores a number of qualitative research approaches and methods, including ethnography, ethnomethodology, participant observation, interviews, focus groups, content analysis, discourse analysis, and some comparative/historical methods. Also exploreS the important theoretical and ethical issues that bear on these approaches. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PhD student |
| PAF | 620 | Public Administration Professional Development Workshop | Prepares doctoral students to become productive and effective public administration scholars, teachers, and researchers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student |
| PAF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PAF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PBH | 100 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| PBH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | CS | Prerequisite(s): completion of General Studies MA requirement with C or better; minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| PBH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| PBH | 444 | Public Health Field Experience | Provides opportunity to gain experience working in community and public health settings. Course meetings provide guidance during the field experience and an opportunity for students to share their projects. | N | RSC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Prerequisite(s): EXW 450; HCD 101 or PBH 100 |
| PBH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| PBH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PGM | 100 | PGA/PGM Introduction | Introduces the golf professional training program. Career enhancement, rules of golf, tournament operations, and playing professional development programs. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 110 | Player Development I | Introductory instruction on golf game improvement to assist PGM students in preparation for Players Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 111 | Player Development II | Instruction to assist PGM students in preparation for Players Ability Test with emphasis on full swing mechanics and practice plan development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 112 | Player Development III | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |

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| PGM | 113 | Player Development IV | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 114 | Player Development V | Introductory instruction on golf game improvement to assist PGM students in preparation for Player Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 120 | Golf for Business and Life | Introduces nongolfing students to the game of golf. For beginners. | N | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 130 | PGA/PGM Level 1 | Focuses on golf professional training program and the completion of the PGA Level One experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 150 | Teaching Golf I | Introduces golf instruction. Focus on fundamentals of golf swing and teaching techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 166 | Turf Equipment Management | Introduces turf equipment used on golf courses. Instruction in maintenance, adjustment, and safety issues. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 200 | PGA/PGM Level 2 | Focuses on golf professional training program and the completion of the PGA Level Two experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 250 | Teaching Golf II | Communicating with student golfers, swing evaluation, key factors club fitting, developing a successful teaching practice. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 300 | PGA/PGM Level 3 | Business planning and operations, business communications related to business of golf. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 350 | Teaching Golf III | Teaching swing concepts. Developing a teaching philosophy, analyzing flawed swing mechanics through video and swing analysis software. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 367 | Landscape Plants and Design | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 4 | | |
| PGM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 400 | GPTP IV | Food and beverage control, supervision and delegation of golf facilities. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 466 | Integrated Pest Control | Management of pests affecting golf turf and landscape plants. Structural Pest Control Board sprayer certification preparation offered during the semester. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| PGM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 326 | Philosophy of Happiness | Examines ancient and contemporary philosophical models of happiness and consideration of criteria for living a life of human flourishing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| PHI | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |

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| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 300 | Philosophical Argument and Exposition | Develops techniques of philosophical argument and exposition. Frequent written exercises. Course content may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Prerequisite(s): Philosophy majors; minimum 25 hours; ENG 102 with C or better |
| PHI | 304 | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 307 | Philosophy of Law | Nature and source of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 310 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Credit is allowed for only BIO 324 or PHI 310 |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MAT 119 (or higher); Minimum 30 hours; Credit is allowed for only HPS 313 or PHI 313 |
| PHI | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | 318 | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI), Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 320 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |
| PHI | 325 | Philosophy of Social Science | Philosophical problems surrounding the aims, structure, and methods of the social sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |
| PHI | 328 | History of Ancient Philosophy | History of Western philosophy from its beginnings through the Hellenistic period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 329 | History of Modern Philosophy | History of Western philosophy from the Renaissance through Kant. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 330 | Theory of Knowledge | Nature, sources, and limits of human knowledge. Topics may include truth, a priori knowledge, empirical knowledge, perception, induction, and skepticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 331 | Philosophy of Language | Problems pertaining to the nature of language, including meaning, reference, truth, definition, analyticity, translatability, synonymy, and contributions of contemporary linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 332 | Metaphysics | Problems pertaining to the nature of reality. Topics may include nature of person, minds, substance, universals, space, time, causation, and modality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHI | 333 | Symbolic Logic | Studies symbolic techniques to represent knowledge, deductive arguments, refutation by counter-example, and model-theoretic representation. Covers propositional and first-order predicate logic and provides a deeper understanding of theories about the world and of reasoning in life generally. Students gain a valuable tool for any field or discipline in which rigorous thinking is necessary such as science, medicine, business and the legal profession. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 or 105 or 108 with a C or better; Minimum 25 hours |
| PHI | 334 | Philosophy of Mind | Nature of consciousness. Common sense view of mind, behaviorism, materialism, dualism, functionalism, self-knowledge, and knowledge of other minds. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 335 | History of Ethics | Major works of moral philosophy, both ancient and modern, such as those by Plato, Aristotle, Hobbes, Hume, Kant, and Mill. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 336 | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 337 | Ethical Theory | Theories in normative ethics about the nature of what is right and wrong, good and bad, virtuous and vicious. May include issues in metaethics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 338 | Metaethics | Concerns questions about the nature of value, morality, and normativity in general, such as "Is morality objective, subjective, or relative?" | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 25 hours. Credit is allowed for only PHI 338 or PHI 420 (Metaethics) |
| PHI | 339 | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 347 | Philosophical Theories of Constitutional Interpretation | In-depth study of the philosophical theories surrounding constitutional rights and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 360 | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| PHI | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 401 | Rationalism | Examines classical philosophical rationalism, as in Descartes, Spinoza, Malebranche, or Leibniz. Contemporary rationalist thought may also be examined. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 402 | Empiricism | Examines representatives of either classical or contemporary philosophical empiricism, e.g., Bacon, Hobbes, Locke, Butler, Berkeley, Reid, Hume, Mill, Carnap, and Ayer. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 403 | Contemporary Analytic Philosophy | Aims and methods of such 20th-century philosophers as Frege, Moore, Russell, Wittgenstein, Carnap, Ayer, Wisdom, Ryle, Austin, Strawson, Quine, and Sellars, with application to metaphysics and epistemology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 405 | Moral Psychology | Advanced study of key, contemporary authors and issues in moral psychology as a subfield of philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate student; Minimum 56 hours; Credit is allowed for only PHI 405 or 420 (Moral Psychology) |
| PHI | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | 413 | Advanced Symbolic Logic | Properties of formal systems axiomatizing propositional and 1st-order predicate logic. May also include modal logic, number theory, and limits of logicism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 420 | Topics in Philosophy | Course descriptions on file in department. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): undergraduate Philosophy major; minimum 56 hours |
| PHI | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MIC 420, PHI 317, HPS314, or PHI 428 with C or better. Credit is allowed for only MIC 428 or PHI 428 |
| PHI | 448 | Justice and Reparations | Advanced study of the moral basis of reparations and reparative justice. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate student; Minimum 56 hours; Credit is allowed for only PHI 448 or 420 (Jus/Reparations) |
| PHI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |

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| PHI | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | |
| PHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| PHI | 501 | Foundations of Ethics I | Studies primary texts of classic ethical theories and their applications to various issues in daily life and the professions. Ethical traditions include some of these frameworks: virtue ethics and natural law ethics, consequentialism and contractualism, deontology and critical communitarianism. Pays attention to the shifting nature of the relation between ethics and religion. In the applied, activity-portion of the course, students investigate real-life ethical issues and examine them from several normative perspectives. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PHI | 520 | Topics in Applied Philosophy | Selected topics in applied philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 521 | Bioethics | Addresses current controversies and major topics in bioethics and biosciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 522 | Ethics of Sustainability | Explores the normative framework of sustainability. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 524 | Disaster Ethics | Investigates moral and political questions connected to disasters and emergencies such as obligations of aid workers, responsibilities for preparedness and rebuilding, and related social justice questions. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 525 | Rational Choice | Recent philosophical work on rational decision making. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 526 | Evolution and Strategic Interaction | Recent work on the philosophical significance of evolutionary models of social interactions and social structures. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 527 | Justice and Reparations | Explores the moral, legal and political aspects of reparative justice after episodes of mass violence, massive human rights violations and intergenerational harms to specific groups (for example, African-Americans and Indigenous peoples). Explores what normative moral conceptions of reparative and restorative justice support obligations to repair historical injustice, as well as contemporary forms of systemic or structural injustice for affected groups. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 529 | Feminist Philosophy | Examines contemporary feminist work in some of the subfields of philosophy, such as ethics, political philosophy, epistemology. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 530 | Moral Psychology | Central issues and texts in moral psychology including the impact of psychological research on philosophical theorizing. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 531 | Philosophy of Emotion | Theories of what an emotion is and the relevance of emotion to work in various subfields of philosophy such as ethics and philosophy of fiction. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 532 | Experimental Philosophy | Examines experimental work taken to directly bear on important philosophical theories. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 533 | Philosophy and Art | Recent philosophical work in the philosophy of fiction, visual art and/or music. Also discusses the fittingness of art works to address philosophical topics, especially in ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 540 | Topics in Value Theory | Selected topics in value theory. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 541 | Normative Ethics | Explores one or more leading normative ethical theories that inform the contemporary discussions in ethics, applied ethics, issues of justice and human rights, and public policy. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 544 | Studies in Meta-Ethics | Selected topics in meta-ethics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 545 | Studies in Philosophy of Law | Selected topics in the philosophy of law. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 546 | Studies in Political Philosophy | Selected topics or figures in political philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |

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| PHI | 555 | Topics in Formal Methods | Selected topics in formal methods. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 556 | Advanced Symbolic Logic | Advanced topics in logic relevant to philosophical theorizing such as modal, deontic and temporal logic. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 557 | Philosophy of Mathematics | Examines selected topics and theories in the philosophy of mathematics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 560 | Topics in Epistemology | Selected topics in epistemology | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 562 | Perception | Recent work on the nature and content of perception. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 565 | Probabilism | Recent work on rational belief, evidence and belief change. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 566 | Studies in Philosophy of Science | Selected topics in philosophy of science. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 570 | Topics in Metaphysics | Selected topics in metaphysics | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 571 | Studies in Philosophy of Mind | Selected recent philosophical work in philosophy of mind such as the nature of sensation and perception, theories of consciousness, and the unity of the self | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 572 | Studies in Philosophy of Language | Selected recent philosophical work in philosophy of mind language as theories of meanings, direct reference and vagueness. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 576 | Realism | Recent work on realism and anti-realism, starting with Michael Dummett, and including philosophers such as Hilary Putnam, Donald Davidson, John McDowell and Kit Fine. Global realism and anti-realism and more specific realisms/antirealisms about the past, the mind, theoretical entities, mathematics and ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 581 | Studies in Ancient Greek Philosophy | Selected topics in ancient philosophy from 585 BC to 529 AD. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 582 | Studies in Modern Philosophy | Selected topics and significant figures in the modern period. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 586 | 20th and 21st C. Philosophers | Examines the work of one or more philosophers prominent in the 20th or 21st century. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 587 | Topics in the History of Philosophy | Selected topics in the history of philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisites: Masters or Doctoral Philosophy student. |
| PHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

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| PHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 205 | Philosophy and Film | Introduces philosophical themes via the medium of film. Students read classical and contemporary literature in philosophy, view films that portray philosophical concepts, and demonstrate their understanding through writing assignments and class presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only PHI 205 or PHI 294 (Philosophy and Film) |
| PHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | 303 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| PHI | 304 | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 307 | Philosophy of Law | Nature and source of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 318 | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |

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| PHI | 320 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 335 | History of Ethics | Major works of moral philosophy, both ancient and modern, such as those by Plato, Aristotle, Hobbes, Hume, Kant, and Mill. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 336 | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 339 | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 360 | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| PHI | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |
| PHI | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| PHI | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| PHI | 411 | Continental Philosophy | Contemporary European thought emerges out of a crisis of the Enlightenment that unfolds throughout the 19th and 20th centuries. Kant's critique of the theoretical, practical, aesthetic and religious foundations articulates this crisis in Western philosophy, society and culture. Explores Continental thinkers and schools of thought in light of Kant's understanding of this crisis. Figures might be Nietzsche, Marx, Freud, Kierkegaard, Husserl, Heidegger, Benjamin, Adorno, Marcuse, Sartre, de Beauvoir, Irigaray, Kristeva, Spivak, Habermas, Lévinas, Marion, Derrida and others. Schools of thought considered may include existentialism, phenomenology, hermeneutics, critical theory, poststructuralism, deconstruction, feminist theory, critical race theory, postcolonial theory, and comparative philosophy. Continental philosophy dovetails with other fields like communication, cultural studies, law, political science, religious studies, literature and various social sciences. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours. Credit is allowed for only PHI 411 or PHI 494 (Continental Philosophy & Religion) or PHI 494 (Studies in Continental Philosophy) |
| PHI | 412 | Philosophy and Literary Criticism | Explores dynamic tensions between philosophical and literary critical approaches to texts. Aims to identify distinct ways that literature and critical practices "philosophize" about truth, moral dilemmas or existential struggles. Probes the challenges that each form of inquiry, philosophical and critical, poses for the other. Seeks to enhance understanding of the philosophical underpinnings of key literary works. May address poetry, novels and other media. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; minimum 30 hours. Credit is allowed for only PHI 412 or PHI 494 (Philosophy and Literature) or ENG 401 (Philosophy and Literary Criticism) |
| PHI | 421 | Philosophical Topics | Focuses on important issues within the discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| PHI | 439 | Philosophy of Love and Sex | Advanced introduction to historical and contemporary philosophical writings and sociological case studies on the philosophy of sex and love. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only PHI 439 or PHI 494 (Philosophy of Love and Sex) |
| PHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| PHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| PHL | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| PHL | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHS | 110 | Fundamentals of Physical Science | One-semester survey of the principles of physics and chemistry. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHS | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| PHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |
| PHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 505 | Energy and the Environment | Current problems in energy resources, production, consumption, and conservation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 530 | Methods of Physics Teaching I | Inquiry approach to high school physics teaching. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 531 | Methods of Physics Teaching II | Extension of modeling techniques introduced in PHY 580. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 534 | Methods of Teaching Physical Science I, II, III | Design of curriculum and conduct of instruction for physical science courses. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| PHS | 542 | Integrated Mathematics and Physics | Mathematical models and modeling as an integrating theme for secondary mathematics and physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 556 | Astrophysics | Structure and evolution of stars, galaxies, and the universe. For secondary school teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 560 | Matter and Light | Interactions of light with matter. Lasers and spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 570 | Spacetime Physics | Special and general theories of relativity with implications for space and time travel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only CHM 581 or PHS 581 |
| PHS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |

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| PHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |

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| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 121 | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | 122 | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |
| PHY | 131 | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 132 | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | 321 | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | 331 | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | 361 | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | 456 | Laser Optics | Theoretical and experimental aspects of applied optics including basic concepts of lasers, properties of optical beams, resonators and interferometry. Course consists of two parts: preparatory labs and applied projects. Preparatory labs provide theoretical and technical background for understanding of general features of electromagnetic wave propagation and technical features of optical lasers including high-power laser systems. Applied projects give students the opportunity to use laser optical systems to solve real-world problems. | N | LEL | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): PHY 361; Credit is allowed for only ABS 494 (Advanced Laser Laboratory), ABS 494 (Laser Optics) or PHY 456 |
| PHY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): minimum 45 hours |
| PHY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): minimum 45 hours |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 118 | Explorations in Science Teaching | Examines the field of physical science education via in-class meetings and classroom settings. Discusses the theory, pedagogy and practice of teaching physical science. Reviews various curricula available for the teaching of physical science with a focus on state and national standards. Students work with course instructor(s) to design three lessons that work toward some of the objectives of each cooperating teachers' class. Students are aided in developing materials, guided in planning to teach the lesson, and given time to prepare and practice the lesson. | N | SEM | N | GNA | Liberal Arts and Sciences | Department of Physics | 1 | | Pre-requisite: Mathematics or Physics or other science major |
| PHY | 121 | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | 122 | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |
| PHY | 131 | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |

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| PHY | 132 | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | 150 | Physics I | Introductory physics for majors. Kinematics, Newton's Laws, basic forces, energy, momentum, special relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisites: MAT 266 or MAT 271 with C or better if completed |
| PHY | 151 | Physics II | Continuation of PHY 150. Electromagnetic fields; Ampere's and Faraday's Laws; Maxwell's equations; basic circuit elements. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 150 (or PHY 121 and PHY 122) with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 201 | Mathematical Methods in Physics I | Differential equations, linear equations, vectors, matrices, Fourier series, and numerical methods. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | CS | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |
| PHY | 241 | University Physics III | Thermodynamics, kinetic theory, physical and wave optics, relativity, photons, matter waves, atomic physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 131 |
| PHY | 252 | Physics III | Continuation of PHY 151. Wave physics, oscillations, harmonic systems, physical optics, thermodynamics, kinetic theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |
| PHY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 302 | Mathematical Methods in Physics II | Continuation of PHY 201. Vector calculus, complex variables, partial differential equations, special functions, numerical methods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY201 with C or better |
| PHY | 310 | Classical Particles, Fields, and Matter I | Particle kinematics, mechanics, conservation laws, particle motion in force fields, dynamics of two-body systems, reference frames, rigid body motion, relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 201 with C or better; PHY 252 with C or better. Co-requisite: PHY 302 |
| PHY | 311 | Classical Particles, Fields, and Matter II | Electrostatic and gravitational fields, Poisson and Laplace equations, dielectric materials, magnetic fields and materials, magnetic induction, Faraday's Law. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 310 with C or better |
| PHY | 312 | Mechanics and Electromagnetism | Covers two major topics in physics, both dealing with forms of energy and momentum and how they are transmitted in space. Covers mechanics and dynamics, describing how bodies with mass move under various types of forces. Also covers electromagnetism, which describes how electric charges and magnets, and their motions, generate fields of force. Also describes how time-varying electric and magnetic fields are associated with electromagnetic waves, which include light. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 150, 151, and 252 (or PHY 121, 122, 131 and 132) with C or better |
| PHY | 314 | Quantum Physics I | Photons, models of the atom, wave properties of matter, introduction to wave mechanics, 1-D systems in quantum mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisites: PHY 201 with C or better; PHY 252 with C or better |
| PHY | 315 | Quantum Physics II | General principles of quantum mechanics, 3-D problems, approximation methods, spin, introduction to many-particle systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 314 with C or better |
| PHY | 321 | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 331 | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 333 | Electronic Circuits and Measurements | Basic principles of electronic circuit analysis and measurement techniques using modern instrumentation and computer-aided analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: MAT 272 or MAT 267 with C or better; PHY 151 (or PHY 131 and PHY 132) with C or better |
| PHY | 334 | Advanced Laboratory I | Selected experiments from contemporary physics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report form writing. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | L | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 (or PHY 131 and 132) with C or better; Pre- or Corequisite(s): PHY 314, 361, CHM 345 or EEE 434 |
| PHY | 361 | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | 371 | Driving Forces in Biology | What are the stable states of biomolecules? How do molecules interact? What forces drive molecules to bond and associate, to adsorb, to permeate through membranes, to undergo chemical reactions, to undergo conformational changes? Why are some changes gradual, as in the weakening of a ligand interaction with temperature, and others sudden (cooperative) such as protein folding or the insolubility of oil in water? Addresses these questions by statistical thermodynamics, a collection of principles and models that when combined with thermodynamics, aim to explain molecular forces and flows. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 252 |
| PHY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 412 | Classical Particles, Fields, and Matter III | Electromagnetic fields of moving charges, Maxwell's equations, harmonic phenomena, oscillations, waves, electromagnetic radiation, covariant electromagnetism, introduction to general relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 311 with C or better |
| PHY | 416 | Quantum Physics III | Introduces the quantum theory of atoms, molecules, solids and nuclei, Dirac's equation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 315 with C or better |

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| PHY | 441 | Statistical and Thermal Physics | Statistical and experimental basis of heat, temperature, and entropy. Mechanical and statistical basis of the laws of thermodynamics. Applies macroscopic thermodynamics. Phase equilibrium. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 444 | Fundamentals of Nanoscience | For senior science majors and beginning graduate students teaching the cross-disciplinary subject of nanoscience. There is a strong emphasis on basics, so the course starts with a fairly rigorous introduction to quantum mechanics, statistical mechanics and chemical kinetics, though enough material is provided to allow nonphysics majors to come up to speed in these areas. This is followed by a survey of experimental techniques in nanoscience: microscopy, optical spectroscopy and scanning probe methods, and nanofabrication methods including "top down" and self assembly. Finally we survey applications: electrons in nanostructures, molecular electronics, nanomaterials and bio-nanoscience. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only PHY 444 or 494 (Intro to Nanoscience) |
| PHY | 452 | Physical Optics | Principles of reflection, refraction, diffraction. Additional topics from contemporary optics may include Fourier transform spectroscopy, linear systems theory, holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 311 with C or better |
| PHY | 462 | Particle and Nuclear Physics | Nuclear properties, models, decays and reactions; fundamental forces, field theories, symmetry principles; hadrons, quarks, and leptons; the Standard Model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 465 | Advanced Laboratory II | Continuation of PHY 334. Students may substitute a short laboratory research project for one of the elective experiments of the course, in consultation with a faculty sponsor and the course instructor. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 334 with C or better |
| PHY | 472 | Advanced Biophysics Lab | Offers selected experiments from contemporary biophysics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report writing. Emphasizes the importance of good notebook keeping. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): PHY 371 |
| PHY | 473 | From Molecules to Cells | Offers selected subjects from biological physics covering the length scales from biomolecules to cells. Builds on knowledge acquired from thermodynamics and statistical mechanics to formulate basic principles behind the working of life systems. Free energy, entropic forces, chemical potentials and electrostatic interactions rule the "nanometer soup" of a living cell. Proton gradients across cell membranes are behind all the energy consumed by life. Random walks, dissipative dynamics, and hydrodynamic fluxes rule time-dependent phenomena. Covers systems including biomolecules, membranes, cells and nerves. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 371 with C or better; Pre/Co-requisite: PHY 472 with C or better if completed |
| PHY | 480 | Methods of Teaching Physics | Evaluates various approaches to the teaching of high school physics. Preparation of demonstrations and experiments. Organization of a lab. Designed for secondary school physics teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 481 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better; Credit is allowed for only MSE 526, NAN 511, PHY 481 or 511 |
| PHY | 482 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 481 with C or better. Credit is allowed for only MSE 527, NAN 512, PHY 482 or 512 |
| PHY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | Prerequisite(s): minimum 45 hours |
| PHY | 495 | Project Research | Supervised project in physics or astrophysics. May be repeated for credit. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |
| PHY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | Prerequisite(s): minimum 45 hours |
| PHY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |

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| PHY | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511 |
| PHY | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 511; Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| PHY | 521 | Classical and Continuum Mechanics | Variational principles, Lagrange's and Hamilton's equations, canonical transformations, Hamilton-Jacobi theory, introduction to chaos and nonlinear dynamics, fundamentals of elasticity theory and fluid mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 523 | General Relativity | Special and general theories of relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 531 | Electrodynamics | Special theory of relativity, covariant formulation of electromagnetic interactions, Maxwell's equations, electrostatics and magnetostatics, dielectric media, inhomogeneous wave equations, Lienard-Wiechert potentials, interactions of charged particles and electromagnetic waves, scattering and diffraction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 541 | Statistical Physics | Postulates of statistical mechanics, equilibrium ensembles, Bose and Fermi statistics, density matrix, modern theory of phase transitions, fluctuations, and linear response theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| PHY | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| PHY | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, SEM 552, or PHY 552 |
| PHY | 553 | Electron Microscopy Laboratory I | Lab support for PHY 552. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Corequisite(s): MSE 552 (or PHY 552). Credit is allowed for only MSE 553 or PHY 553 |
| PHY | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent beam diffraction, and electron holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE or PHY 554 |
| PHY | 555 | Electron Microscopy Laboratory II | Lab support for PHY 554. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |
| PHY | 576 | Quantum Theory | Operator methods in quantum mechanics, time-independent perturbation theory, variational methods, angular momentum and group representation theory, identical particles; quantum dynamics, including time-ordered operators, time-dependent perturbation theory, and Fermi's golden rule. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 577 | Introduction to Quantum Field Theory | Explains necessity of generalizing quantum mechanics to a field theory viewpoint. Studies properties of scalar, spinor, and gauge fields; incorporates interactions; and learns to compute amplitudes, cross sections, and decay rates using formalism of Feynman diagrams. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 581 | Quantum Theory of Solids I | Band structure models: pseudopotentials, density functional theory; optical and magnetic response; elementary excitations; transport theory, electron-photon interactions and superconductivity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 582 | Quantum Theory of Solids II | Continuation of PHY 581: broken symmetry; phase transitions; disorder, topological defects; nano-structures topics; soft condensed matter and current research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |

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| PHY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Pre-requisite: MAT 170 (or higher) with C or better or minimum score of 56% on the Math Placement Test or Co-requisite: MAT 210 (or higher) |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PLA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PLA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| PLA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PLA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLB | 414 | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 108 | Concepts in Plant Biology | Introduces concepts of plant biology that are of human relevance using commercially important, edible, and medicinal plants as examples. Not for majors in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| PLB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 300 | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better; Credit is allowed for only LSC 307 or PLB 300 |
| PLB | 302 | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 305 | Cacti and Succulents | Adaptive biology of desert annuals, cacti, and succulents, analyzing diverse traits that permit survival in deserts: reproduction, structure, and physiology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 306 | Plant Anatomy | Development and mature structure of tissues of vascular plants; patterns and modifications of the leaf, stem, root, and flower. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 308 | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 310 | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 with C or better |
| PLB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MBB 247 or BIO 340 with C or better; Credit is allowed for only MBB 350 or PLB 350 |
| PLB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 401 | Mycology | Fungal morphology and systematics with an introduction to fungal cell biology, ecology, economic significance, and growth and development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 407 | Plant Fossils and Evolution | Broad survey of plant life of the past, including the structure of plant fossils, their geologic ranges, geographic distribution, and paleoenvironment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 414 | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only BIO 419, PLB 519, BIO 519 or PLB 419 |
| PLB | 420 | Plant Ecology: Organisms and Populations | Factors and controls on the physiological ecology and organization of plants and plant populations using empirical and theoretical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 with C or better |
| PLB | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 181, GPH 111 or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| PLB | 432 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| PLB | 440 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| PLB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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| PLB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| PLB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only MBB 496, BIO 496, MIC 496 or PLB 496 |
| PLB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| PLB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| PLB | 502 | Perspectives in Plant Biology | Introduces major areas of research within the department with the goal of broadening knowledge to enable multidisciplinary research and communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only PLB 419, BIO 419, BIO 519 or PLB 519 |
| PLB | 525 | Microclimate Methods | Techniques to measure and quantify microclimate and mass transfer. Supporting principles. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 558 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |

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| PLB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |
| PLB | 300 | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better; Credit is allowed for only LSC 307 or PLB 300 |
| PLB | 302 | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 308 | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 310 | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 with C or better |
| PLC | 101 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 102 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| PLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 201 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 202 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: PLC 201 with D |
| PLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 311 | Advanced Polish I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 202 with C or better; Credit is allowed for only PLC 311 or 394, Polish Comp and Conversation |
| PLC | 312 | Advanced Polish II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 311 with C or better |
| PLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 11-12 | | |
| PLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 101 | Elementary Portuguese | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| POR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| POR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 201 | Intermediate Portuguese | Continuation of POR 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: POR 101 with C or better |
| POR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 313 | Portuguese Composition and Conversation | Develops skill in written Portuguese and corrected oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 201 with C or better |
| POR | 314 | Portuguese Composition and Conversation | Continuation of POR 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 313 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 472 | Luso-Brazilian Civilization | Lectures, readings, and discussion of important aspects of Luso-Brazilian civilization. Topics from music, art, folklore, literature, history, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: POR 313 with C or better; Credit is allowed for only POR 472 or 598 (Luso-Brazilian Civilization) |
| POR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485, GPH 485, LAP 485, POR 485, PUP 485 or 585 |
| POR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| POR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| POR | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): maximum 25 hours |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 325 | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 346 | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 351 | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 364 | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 370 | Law and Society | Analyzes debates among social scientists and legal theorists concerning the relationship between law and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 401 | Political Statistics | Basic concepts in statistics as they facilitate the description, explanation, and prediction of social and political phenomena. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): POS 301 with C or better |
| POS | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 426 | Elements of Public Policy | Each section may cover one of the following topics: consumer protection, natural resources, criminal justice, environmental protection, science and technology, or theories of public policy. May be repeated for credit when topics vary. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 431 | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 439 | Minority Group Politics in America | Role of minority groups in American politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Prerequisite(s): minimum 45 hours |
| POS | 467 | International Security | Examines issues affecting the international security of states and peoples, e.g., military, economic, technological, environmental, and demographic. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 471 | Constitutional Law I | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; jurisdiction and organization of the federal courts; judicial review; separation of powers; federalism; the commerce clause; national taxing and spending power; state police power. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 472 | Constitutional Law II | Development of the U.S. Constitution as reflected in decisions of the Supreme Court, due process; equal protection of laws; individual rights; civil liberties. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| POS | 485 | Political Economy | Problems, policies, and possibilities of various political-economic systems and the interrelationship of capitalism, socialism, and democracy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Credit is allowed for only HST, POS 112 or HST 194 (Foundations of Democracy) |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |

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| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | Pre-requisites: Freshman status; Maximum 25 hours |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | Prerequisite(s): maximum 25 hours |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 211 | Arizona Constitution and Government | Constitution and government of the State of Arizona. Meets the Arizona constitution requirement for teacher certification. May not be counted for the major or a teaching major or minor in Political Science | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 2 | | Credit is allowed for only POS 211, 216 or 417 |
| POS | 216 | State and Local Government | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POS 211, POS 216 or POS 417 |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L or SB | |
| POS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | |
| POS | 270 | American Legal System | Concepts, institutions, classifications, and functions of law. Role of the courts and impact of judicial decision making on social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 300 | Contemporary Global Controversies | Explores key controversies in global politics including security, economic stability, poverty, gender, race, and the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 301 | Empirical Political Inquiry | Logic of political inquiry, including research problems, concepts, hypotheses, theories, measurement, data collection, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 305 | Politics and Film | Examines portrayal of political events, ethnic groups, and sociopolitical situations in film, a major medium addressing questions of human values. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 313 | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 313 or POS 313 |
| POS | 314 | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 315 | The Supreme Court | Role of the Supreme Court in American society and politics; examines decision-making process and impact of decisions; restraint versus activism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| POS | 325 | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 331 | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 332 | American Political Parties | Development of the American party system. Party organization and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 333 | Interest Groups | Examines how minority, corporate, labor, farm, consumer, environmental, health, education and public interest groups, and single-issue movements influence government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 340 | History of Political Philosophy I | Western political philosophers and their theories to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 341 | History of Political Philosophy II | Western political philosophers and their theories from the 17th to the 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 346 | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 351 | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia) | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 352 | European Democracies | Addresses questions such as, How has the relationship between European citizens and the democratic process changed in the post-WWII period? How do domestic political institutions influence this process? Explores different approaches to some of the most important questions facing the study of comparative and European politics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Minimum 25 hours. Credit is allowed for only POS 394 (European Pol Democracies), 498 (European Democracies), or POS 352 |

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| POS | 353 | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |
| POS | 356 | European Union | History and workings of EU member states, including single market, Euro, legal system, ethnonationalism, immigration, expansion, trade wars, and defense. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 357 | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 358 | Southeast Asia | Political background, governmental institutions, political dynamics, and developmental problems of Southeast Asian nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 359 | African Politics and Society | Comparative analysis of socioeconomic forces, political processes, government institutions, and political novels in Sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 364 | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 367 | World Politics and Global Inequalities | Examines the topic of global inequality and the numerous challenges that arise from it, including perspectives and theories pertaining to third world development, the historical background to the political and economic relations between the wealthy countries of the world and the poorer countries, and policies and strategies designed to promote development and alleviate poverty. Studies some contemporary issues that are related to global inequality including ethics and third-world development, sweatshop labor, corporate responsibility, and the tension between globalization and the movement of people across sovereign borders. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 360 (Current Issues International Politics), (International Security), (Organizational Studies) or POS 367 |
| POS | 368 | Ethics and Human Rights | Explores issues of ethics, morality, and human rights in the global community. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 370 | Law and Society | Analyzes debates among social scientists and legal theorists concerning the relationship between law and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| POS | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 401 | Political Statistics | Basic concepts in statistics as they facilitate the description, explanation, and prediction of social and political phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | CS | Prerequisite(s): POS 301 with C or better |
| POS | 410 | Governing American Cities | Reviews modern urban problems, their sources, and potential solutions, including structural and policy alternatives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 426 | Elements of Public Policy | Each section may cover one of the following topics: consumer protection, natural resources, criminal justice, environmental protection, science and technology, or theories of public policy. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 431 | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 435 | Women and Politics | Focuses on the uniqueness of women in modern political systems and political thought. Emphasis may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | |
| POS | 439 | Minority Group Politics in America | Role of minority groups in American politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | Prerequisite(s): minimum 45 hours |
| POS | 442 | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 443 | Topics in Contemporary Political Theory | Major problems and theories in contemporary political thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 451 | China, Japan, and the Koreans | Comparative analysis of the political modernization experiences of China, Japan, and the two Koreas, focusing on their differing reactions to the West. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 452 | China | Background of the Communist revolution, political processes, and developmental problems in China from a comparative perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 453 | Latin America | Political institutions, process, and developmental problems of South American states examined through comparative analysis, novels and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisite: minimum 25 hours |
| POS | 454 | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 465 | International Organization and Law | History, practical political significance, and future of international institutions, transnational regimes, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 467 | International Security | Examines issues affecting the international security of states and peoples, e.g., military, economic, technological, environmental, and demographic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 468 | Comparative Asian foreign Policies | Foreign policies of the Asian states, emphasizing their security relations and movements toward regionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 471 | Constitutional Law I | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; jurisdiction and organization of the federal courts; judicial review; separation of powers; federalism; the commerce clause; national taxing and spending power; state police power. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 472 | Constitutional Law II | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; due process; equal protection of laws; individual rights; civil liberties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 482, JUS 473 or POS 473 |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 485 | Political Economy | Problems, policies, and possibilities of various political-economic systems and the interrelationship of capitalism, socialism, and democracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 486 | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | L | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| POS | 503 | Empirical Political Inquiry | Research methods and techniques of the discipline, emphasizing empirical foundations and analytic methods employed in subfields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Political Science student |
| POS | 527 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| POS | 530 | American Politics | Examines major debates in the study of American political processes and institutions. Covers parties, media, elections, public opinion, interest groups, and the three branches of government. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |

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| POS | 540 | Ancient Political Theory | Surveys the historical and philosophical developments in political thinking from the ancient Greeks up to the Renaissance. The world studied predominantly is one of profound political conflict and change. Moves from the Greek cities to the edge of modern political developments. The movement encompasses the political transformation from city-states to empires to the establishment of an overarching Christian world order that balances secular and sacred power, only to be challenged if not foundationally shaken by Machiavelli and realism. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate Political Science major |
| POS | 541 | Modern Political Theory | Surveys the development of modern political thought from Machiavelli--through Hobbes, Locke, Hume, Rousseau, Burke, Kant, Montesquieu, Constant, Bentham, Mill, and Hegel--to Marx. Focuses on the primary writings of these thinkers as well as reading secondary literature. In addition to focusing on the distinctive contribution and relevance of individual thinkers, further explores certain recurring themes among which are the following: Are freedom and equality foes or friends? What allegiance do we owe the state and why? Do we have rights against the state? What is a just state? Is private property essential to individual liberty? Do laws enhance or threaten liberty? Is self-interest an adequate basis for political allegiance? Why should we pursue the common good, if at all? Are self-interest and the common good reconcilable? | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD major; Credit is allowed for only POS 541 or 591 (Modern Political Thought) |
| POS | 545 | Themes in Political Thought | Examines a particular theme or problem in political thought from both a historical and contemporary perspective. May be repeated with approval of the director of graduate studies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 550 | Comparative Politics | Surveys major approaches across topical areas such as revolutions, authoritarianism, policy processes, interest groups, and electoral politics. Focus varies with instructor. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 552 | Women and Politics | Serve as an introduction to the comparative study of women and politics. Not a course on feminist theory; instead focuses on questions such as: Does the descriptive representation of women guarantee their substantive representation? Which electoral rules favor the election of women? Do the negative effects of gender quotas outweigh their impressive ability to increase the number of women in office? Have the news media helped or harmed female candidacies? Once in power do women govern differently than men? Focuses on the obstacles that women face in obtaining positions of power. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 552 or 598 (Women and Politics) |
| POS | 560 | International Relations | Surveys major theoretical approaches and debates in international relations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 563 | Comparative Asian Security Policies | Analyzes domestic and international constraints, belief systems, and economic components in security decisions by major powers and Asian nations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 570 | The Politics of Public Policy | Examines the political dimensions of public policymaking. Emphasizes major theoretical explanations of the policy process--particularly elements such as agenda setting, implementation, and policy change--rather than on the substance of particular policies. Focuses primarily on U.S. domestic policy, with some comparative reference to other developed democracies. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 570 or 598 (Politics of Public Policy) |
| POS | 571 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 501 or POS 571 |
| POS | 572 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: HSD 501 or POS 571 with B or better. Credit is allowed for only HSD 502 or POS 572 |
| POS | 573 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |

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| POS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 586 | International Political Economy | International political economy (IPE) focuses on the relationship between the pursuit of wealth and power during the development and evolution of the global political economy. Assigned readings take an analytical approach to the subject, drawing on methods and theories developed in political science, economics, history and sociology. In addition to an overview of the methods and theories employed in the study of IPE, also examines a variety of current empirical research programs in the subfield. This seminar should enable students to read the academic literature, conduct independent research in the subfield, and understand contemporary problems in the global political economy. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| POS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 601 | Advanced Experimental Research | Introduces experimental and quasi-experimental research designs in political research, including lab techniques and topics in the analysis of variance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 603 | Polimetrics I | Introduces theory and practice of linear regression analysis. Provides skills to read, understand, and evaluate professional literature using regression analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 604 | Polimetrics II | Applies quantitative techniques to research topics producing publishable papers through exposure to time-series, logit and probit, and simultaneous equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 606 | Qualitative and Textual Analysis | Method and theory for the analysis of qualitative materials, systematic approaches for case studies, content analysis, critical analysis of texts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 636 | Electoral Behavior | Introduces fundamental concepts of electoral behavior. Emphasizes presidential elections and examines why people vote and how their votes are determined. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 638 | Law and Politics | Emphasizes research into such topics as constitutional law, women and the law, American legal system, judicial process, and judicial selection. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 652 | Religion and Politics | Analyzes the complicated and often conflictual relationship among major religious faiths, religious activists, and the state in the 20th and 21st centuries. Cover topics: secularization theory and its problems; religion as a cultural or attitudinal variable in politics; the rationality of religion, organized religions and their activists; the bases for conflicts between religion and the state; religion's role in conflict; the terms of reconciliation and collaboration; the conditions under which religion is politicized and becomes the basis of a political movement or party; and the means by which organized religions and/or their adherents seek to maintain an influence in 20th- and 21st-century politics and society. Does not provide a survey of religion and politics for all major world religions, or other religions. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD student; Credit is allowed for only POS 652 or 598 (Religion and Politics) |
| POS | 664 | War, Peace, and Conflict Processes | Systematic analysis of the causes of war, the preconditions for peace, and approaches to the resolution of conflict. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 671 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 601 or POS 671 |

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| POS | 672 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 602 or POS 672 |
| POS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| POS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): maximum 25 hours |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | |
| POS | 247 | Introduction to Latin American Politics | General introduction to the politics and socioeconomic structures of Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & G | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 313 | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 313 or POS 313 |
| POS | 314 | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 331 | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| POS | 342 | Political Theory | Surveys ancient, modern, and contemporary political theorists and ideas in European and American contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU or SB | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 353 | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |

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| POS | 354 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 357 | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 362 | World Politics Theory | Theoretical examination of one or more aspects of international politics, e.g., foreign policy, negotiations, alliances, crises, wars, and international systems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 360, POS 160 or POL 160. |
| POS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 436 | Gender, Sexuality, Nation-States | Issues and problems related to the interface of gender, sexualities, nationalisms, and states in various world contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| POS | 437 | Women, Power, and Politics | The roles and treatment of women within various political contexts. Specific focus may vary with instructor. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| POS | 438 | Latino Politics | Examines contemporary political issues in the diverse Latino community. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| POS | 442 | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| POS | 446 | Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| POS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| POS | 454 | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 456 | Latin American Cities | Urban studies of Latin American world cities, e.g., Mexico City, Santiago, emphasizing integration with U.S. cities, including Los Angeles, Phoenix. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 464 | Border Cities: Action Research on Globalization | Examines the effects of globalization on U.S.-Mexico border cities and towns with particular emphasis on Mexican border cities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 470 | Law and the Political Order | Investigates concepts of justice, political rights, adjudication and legislation, legal ordering, constitutional law, law as an instrument of change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POS 470, CMN 598 (Law and the Political Order), JHR 598 (Law and the Political Order) or MAS 598 (Law and the Political Order) |
| POS | 475 | Morality and Politics | Should morality play a role in politics? Machiavelli gives us one sort of answer, urging politicians to be dishonest, deceptive and even cruel. Kant disagrees, arguing instead that politicians should adhere to their personal morality over political calculations. Explores this question in two ways. First, looks more at the disagreement between great thinkers in the Western political tradition. Second, investigates contemporary political actors who bring moral concerns to the fore, including dirty politicians and extremist citizens (for example, radical animal rights activists, militant environmentalists or global poverty zealots). Seminar course that incorporates in-class discussion and writing, options-based grading and creative assignments. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only POS 394 (Morality and Politics) or POS 475 |
| POS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| POS | 486 | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |

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| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| PPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 210 | Teaching Fitness Activities for K-12 Students | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 215 | Teaching Team Sports | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 220 | Teaching Lifetime Activity K-12 | Participating in and teaching sequenced activities K-12. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 225 | Teaching Cooperative and Initiative Games | Participating in and teaching sequenced adventure-based activities. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 230 | Teaching Group Exercise | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Credit is allowed for only PPE 230 or 294 (Teaching Group Exercise) |
| PPE | 235 | Teaching Strength and Conditioning for Health | Fundamental principles, strategies and assessments of strength training and conditioning methodologies that are necessary to effectively operate in a school-based setting. Most secondary schools offer some form of strength training in a physical education setting, either as a stand-alone course or as part of a traditional class structure. Therefore, new physical education teachers should be well informed on the scientific rationale for the use of strength and conditioning programs in schools, and be able to design and implement these programs safely. Provides prospective physical education teachers with the knowledge and skills needed to safely and effectively operate in a school-based strength training setting, whether it is for physical education or sport performance. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Credit is allowed for only PPE 235 or PPE 294 (Teaching Strength Conditioning for Health) |
| PPE | 240 | Physical Activity | Recognizing individual interests and abilities, the program provides courses covering a wide variety of physical activities. We make an effort to address contemporary trends and student, faculty and staff interests. Offerings may include but are not limited to classes in the areas of: aquatics, artistic and social dance, fitness development, martial arts, mind/body, outdoor recreation, resistance training, sports and games. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | |
| PPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 300 | Introduction to Physical Education, Fitness and Sport | Introduces the fields of physical education, exercise science, sports medicine, and related fields. Discusses the history and trends of physical education as well as key concepts, programs, problems, and issues related to teaching physical education. Teaches essential background knowledge, better preparing for career success. The online (blackboard) component of this class provides practical experiential learning and assesses knowledge and comprehension of the key concepts presented in the course. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 60 hours; Junior or senior standing; Credit is allowed for only PPE 300 or 394 (Intro to Physical Education, Fitness & Sport) |
| PPE | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Co-requisites: One of the following: ECD/EED/SED/SPE /BLE 396/397/478/496, PPE 474/484 or TEL 484. Credit is allowed for only PPE 310 or HSC 310 |
| PPE | 315 | Pediatric Movement Sciences for Physical Educators | Provides a general overview of the functional anatomy of the human body as it relates to movement and the biomechanical principles underlying the execution of a given motor skill. Also examines the influence of physical growth and maturation on the development of motor skills. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 315 or 394 (Apld Pediatric Functional Anat) |
| PPE | 320 | Exercise Physiology Concepts for Physical Educators | Provides an introductory-level understanding of how the body responds prior to, during, and after participation in dynamic and static exercise. Examines the physiological basis of human movement, with emphasis on reviewing what exercise physiologists have learned about the diversity of physical activity, specifically in children. Although many physiological responses to activity are predictable, the magnitude and pattern of responses are unique depending on the age, gender, and previous experience of the individual. Also examines the role an active lifestyle plays in the overall health and well-being of school-aged children and adolescents. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 320 or 394 (Pediatric Exercise Physical) |

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| PPE | 335 | Movement and Physiology Principles of Children and Youth in Physical Activity Environments | Provides an introductory-level understanding of mechanical principles underlying human movement, the developmental patterns reflected in human movement birth through childhood and adolescence, basic principles of motor learning and the physiological basis of human movement. Covers how these principles directly affect the development of physical activity opportunities in in community-based sport and recreation settings with a specific eye toward the role an active lifestyle plays in the overall health and well-being of children and youth between the ages of 6 and 18. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| PPE | 340 | Understanding Children in Physical Activity Environments | Teaches students an understanding of elementary-aged children and how to implement a curriculum in a physical activity environment. Students learn effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective facilitators use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th grade youngsters. Prospective facilitators leave with requisite knowledge to implement a comprehensive physical activity program and the physical skills necessary for successful instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| PPE | 345 | Adolescents in Physical Activity Environments: Understanding and Practices | Gives an understanding of the changing scope of physical education in an era of education reform. Students learn about and teach a variety of curricular models and styles. Uses technology and assessments in authentic settings. Focuses on increasing the physical activity levels of secondary students during physical education and also promotes physical activity outside of the school setting. Covers strategies for advocating the importance of quality physical education to school and district personnel during a time when local administrators are pressured to allocate more time to core subject areas. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| PPE | 351 | Coaching of Children and Adolescents in Physical Activity Environments | Provide introductory-level understanding of the skills and knowledge needed to deliver positive sport experiences in various nonschool settings that lead to positive youth development. Effective use of these skills enhances the chance that children and youth come to programs that are fun, engaging, safe and positive challenges; while having clear rules, requiring personal responsibility and demanding respect for self and others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| PPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 396 | Clinical Experience in Physical Education: Elementary | Analyzes course content in an elementary/secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Program |
| PPE | 397 | Clinical Experience in Physical Education: Secondary | Analyzes course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Teacher Preparation Program |
| PPE | 430 | Analysis of Skill and Game Performance | Develops analytic skills for informal and formal assessment of student learning in physical activity settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 494, 598 (Analysis of Skill and Game Play Performance) or PPE 430 |
| PPE | 450 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only PPE 450 or PPE 550 |
| PPE | 451 | Innovative Programming in Elementary Physical Education | Provides students with an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students also become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 451 or 551 |
| PPE | 455 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 460 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 465 | Teaching Physical Activity Concepts | Focuses on teaching physical activity concepts in physical education settings and other settings such as fitness clubs or community health organizations. Analyzes and critiques state physical activity standards and national guidelines for promoting physical activity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): minimum 45 hours. Credit is allowed for only PPE 465 or PPE 565 |

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| PPE | 477 | Student Teaching in Physical Education Elementary K-6 | Provides an understanding of elementary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| PPE | 478 | Student Teaching in Physical Education Secondary | Provides an understanding of secondary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in 7th-through 12th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| PPE | 480 | Professional Seminar for Physical Education | Methods of instruction, organization, and presentation of appropriate content in elementary and secondary physical education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to Professional Program |
| PPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Admission to Professional Program |
| PPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 495 | Research on Teaching in Physical Education | Contemporary research and theory on teaching across fields with an emphasis on physical education pedagogy; provides a practical research experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| PPE | 535 | Introduction to Sport Education | Introduces a grade 5-12 school physical education curriculum that focuses on providing more complete and more authentic sport experiences. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (Degree or non-degree) students; Credit is allowed for only PPE 494, 598 (Sport Education) or PPE 535 |
| PPE | 550 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Students who have credit for PPE 450 may not enroll in PPE 550 |
| PPE | 551 | Innovative Programming in Elementary Physical Education | Provides an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only PPE 451 or 551 |
| PPE | 555 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and non-degree); Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 560 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and Non-degree); Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 565 | Teaching Physical Activity Concepts | Teaching physical activity concepts in PE settings. Analyzes and critiques state and national physical education standards. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 465 or 565 |
| PPE | 570 | Research on Teacher Education in Physical Education | Discusses current research on teacher education across fields, with an emphasis on physical education pedagogy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 370 or 570 |
| PPE | 576 | Research on Curriculum in Physical Education | Discusses and applies research findings on curricular models for physical education and physical activity in school settings and beyond. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 593 | Applied Project | | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PRM | 120 | Leisure and the Quality of Life | Conceptual foundations for understanding the role of leisure in the quality of life. Social, historical, psychological, cultural, economic, and political foundations of play, recreation, and leisure. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |
| PRM | 150 | Outdoor Pursuits | Theories and practical applications related to outdoor recreation pursuits. Interdisciplinary approach to wilderness issues and philosophies, culminating in an outdoor experience. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| PRM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 201 | Introduction to Community Sports | Examines the role of community sports at the local, national and international levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CSM 201 or PRM 201 |
| PRM | 210 | Community Services and Professions. | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| PRM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PRM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with C or better; minimum 2.50 GPA; minimum 45 hours. Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| PRM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| PRM | 304 | Recreation Planning and Facility Development | Surveys development and management of public, private, and commercial recreation areas and facilities with a focus on meeting program needs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): CRD 210(or NLM 210,PRM 210 or TDM 210) with C or better; MAT 142, C or better; Nonprofit Leadership & Management (or Parks & Recreation Management or Recreation & Tourism Management) major; minimum 2.50 cumulative GPA; minimum 45 hours |
| PRM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| PRM | 315 | Community Recreation Systems | Explores and assesses community recreation delivery systems in the United States. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM120 (REC120) with C or better |
| PRM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| PRM | 340 | Outdoor Survival | Interdisciplinary approach to outdoor survival, including attitudes, psychological stress, physiological stress, preparation, hypothermia, navigation, flora, and wildlife. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| PRM | 364 | Foundations of Recreation Therapy | Overview of therapeutic recreation and its concepts, practices, service models, and settings. Explores the provision of recreation and treatment services for individuals with disabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | Prerequisite(s): minimum 45 hours |
| PRM | 370 | Public Lands Management | Introduces outdoor recreation resource delivery systems; history of wilderness and outdoor recreation resources; the role of outdoor recreation in society; outdoor recreation agencies; related environmental issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): minimum 45 hours |
| PRM | 380 | Wilderness and Parks in America | Examines the American Conservation Movement and the relationships between the environment and recreation behavior. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB & H | |
| PRM | 384 | Child Life Practicum | Combines clinical field exposure with classroom instruction to maximize understanding and skill mastery. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3-12 | | Pre-requisite: PRM 364 with C or better; Admission to Child Life Certificate program |
| PRM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 400 | Intervention Techniques in Recreation Therapy | In-depth analysis of theoretical and philosophical approaches to therapeutic recreation practice with emphasis on various facilitation techniques used in therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 364 |
| PRM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| PRM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| PRM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing ; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| PRM | 406 | Program Design & Administration in Recreation Therapy | In-depth analysis of assessment, treatment planning, program implementation, documentation, and evaluation strategies employed in therapeutic recreation practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) with C or better: PRM 364, 400 (or PRM 455) |
| PRM | 413 | Leadership & Professional Development in Recreation Therapy | Examines therapeutic recreation leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 301, NLM 301, PRM 301 or TDM 301 with C or better; PRM 303 or TDM 372 with C or better; Senior standing; Minimum 2.50 GPA |
| PRM | 422 | Entertainment, Protocol, and Programming for Special Events | In-depth analysis of the theoretical and philosophical aspects of special event management relative to talent and entertainment, protocol, etiquette, ethics, and programming. Requires some field work in event management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better |
| PRM | 423 | Special Event On-Site Operations | Expands on the concepts of event programming with in-depth examination of the theoretical and philosophical aspects of event operations, festival site design, and working with subcontractors and vendors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |

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| PRM | 427 | Revenue Generation for Special Event Management | Examines theoretical and philosophical aspects of revenue generation relative to special events through in-depth exploration of budgeting, accounting, and sponsorship opportunities. Requires field work at an event. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 450 | Leisure and Aging | Examines the factors influencing leisure among older adults, including policy issues and program service implications. Involves fieldwork. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |
| PRM | 454 | Human Services for At-Risk Youth | Overview of policy and programs affecting at-risk youth; examines risk factors and programmatic solutions to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 455 | Play in Child Life | In depth study of the techniques, principles and theories of play applied in clinical practice to enhance healing, growth and development with children and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CDE 232 with C or better. Pre- or corequisite(s): PRM 364 with C or better if completed |
| PRM | 460 | Assessment & Documentation in Recreation Therapy | In-depth study of the therapeutic recreation assessment process, including examination of interview techniques, assessment instruments, treatment planning, outcomes, evaluation, research, and documentation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 364 with C or better |
| PRM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| PRM | 470 | Environmental Communication | Park interpretation and environmental education that includes theories, principles and techniques. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours |
| PRM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| PRM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |
| PRM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |
| PRM | 486 | Special Events Management | Principles of programming and managing special events for diverse populations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 487 | Advanced Special Events Management | Advanced principles of special event sponsorship, public relations, marketing, contracting, risk management, and financial management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better. Credit is allowed for only PRM 487 or RTM 487 |
| PRM | 488 | Event Marketing and Promotion | In-depth look at the influence and role of print and social media in special event management. Studies theory, strategies, and planning relative to experience marketing, including the use of promotions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PRM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| PRM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| PSB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 501 | Basic Principles of Applied Behavior Analysis | Fundamental principles of behavior including the history, theory, definitions, processes, concepts and characteristics of applied behavior analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 510 | Basic Principles of Experimental Analysis of Behavior | Practical applications of research methodology to examine the effects and evaluate the efficacy of behavioral interventions. Provides an empirical science approach to designing, conducting and critically evaluating research involving applications of the experimental analysis of behavior in the use of graphic displays, single-case, ABAB, multiple baselines, changing criterion and alternating treatment designs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |

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| PSB | 511 | Advanced Research Methods | Focuses on research techniques such as time-series methods for single-case assessment, behavior measurement and the effectiveness of treatment interventions on behavior. Topics include conducting component and parametric analyses and use of experimental designs such as withdrawal, reversal, criterion and multiple baselines. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 520 | Ethical Issues and Professional Standards in Applied Behavior Analysis | Ethical standards and legal responsibilities including regulatory requirements and Arizona licensing statutes for ABA professionals who provide services to individuals with special needs and their families. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 530 | Behavioral Observation and Functional Assessment | Focuses on how to conduct behavioral observations and functional analyses using various methods for assessment and for data collection, organization and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 540 | Development of Applied Behavioral Intervention Programs | Techniques for conducting task analyses; developing target intervention outcomes; determining alternative behaviors and environmental changes; use of behavior change procedures such as reinforcement, extinction, punishment, shaping, modeling, training and teaching. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSB 501, 510. Corequisite(s): PSB 530 |
| PSB | 563 | Basic Principles of Organizational Behavior Management | Overview and the use of Behavioral Systems Analysis (BSA) and Performance Management (PM) as they relate to the identification and modification of environmental variables that can affect and improve individual and organizational performance as a system. Basic techniques include analysis of antecedents, behavior and consequences and development of interventions to support the desired performance improvements and increase system productivity. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |
| PSB | 573 | Advanced Principles of Learning and Analysis of Behavior | Provides an in-depth review of the philosophy and theory of behaviorism and its scientific application. Includes Skinner's conceptual framework plus fundamental elements of behavior change and procedures. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 578 | Applied Behavior Analysis in Developmental Disorders | Provides an overview of the major theories and research related to the development of psychological disorders of childhood and adolescence including autism, attention deficit disorder, behavior disorders and intellectual disabilities. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MS Applied Behavior Analysis major |
| PSB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |

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| PSB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | |
| PSY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | 222 | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 360 | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 390 | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | |

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| PSY | 437 | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 438 | Human-Computer Interaction | Theories, methods, and findings concerning the usability of computer systems and the design of effective user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 439 | Training and Skill Acquisition | Theories, methods, and findings concerning the acquisition of skilled performance and the design of effective training systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 440 | Industrial/Organizational Psychology | Examines personnel selection, performance assessment, job and workplace design, job satisfaction, organizational behavior, management systems, and industrial safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 448 | Human Factors in Transportation | Examines human performance and human-machine design issues in aviation and ground transportation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 449 | Human Factors in Sport | Examines how psychological principles can be applied to enhance the performance of athletes and coaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 453 | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | 477 | Applied Psychology Capstone Experience | Applied psychology from a systems perspective. Requires a report based on research and/or applied work as a culminating experience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): PSY 399 |
| PSY | 528 | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 530 | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 531 | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | 560 | Advances in Theoretical Psychology | Covers new empirical and theoretical work in psychology with emphasis on its applicability. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 561 | Methods in Applied Psychology | Methods of particular value in applied settings, including usability testing, prototyping, and use of computers in data collection and analysis. May be repeated for credit up to 9 hours. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 562 | Advanced Human Factors | In-depth study of the issues, methods, and findings in industrial and organizational psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |

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| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | |
| PSY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 222 | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 231 | Honors Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology for honors students. Lab includes learning to use statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | CS | Prerequisite(s): Barrett Honors student; MAT 119, 170, 242, 251 or higher with C or better; PSY 101 (PGS 101) with C or better |
| PSY | 244 | Introduction to Directed Child Study | Developmental theories and methods of social interaction with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 306 | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 344 | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 351 | Honors Social Psychology | Critical analysis of human social behavior for honors students; topics include stereotyping, social influence, attraction, aggression, helping, groups, and attitudes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): Barrett Honors College student; PSY 101 (PGS 101); Credit is allowed for only PSY 350 (PGS 350) or PSY 351 (PGS 351) |
| PSY | 365 | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 390 | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |

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| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395 |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Liberal Arts and Sciences | Department of Psychology | 1-3 | | |
| PSY | 414 | History of Psychology | Historical development of psychology from its philosophical beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 420 | Analysis of Behavior | Research, applications, and philosophy of the analysis and control of human behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 and 320 with C or better |
| PSY | 424 | Genetic Psychology | Introduces the concepts, methodologies, and findings of behavioral genetics for Psychology majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 425 | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | 426 | Neuroanatomy | Structure and function of mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): PSY 325 with C or better; Credit is allowed for only PSY 426 or 526 |
| PSY | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): BIO 353, 462, 467, MIC 420, or PSY 325, 425 with C or better. Credit is allowed for only MIC 427 or PSY 427 |
| PSY | 430 | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | 432 | Embodied Cognition | Do left-handers think differently from right-handers? Do paraplegics perceive the world differently from those who can walk? If you say about a potential date, "He leaves me cold," do you literally feel cold? And does a Botox treatment to alleviate frown lines makes it difficult to understand sentences about sadness? The surprising answer to all of these questions is YES! Embodied cognition proposes that thinking is based on neural and bodily systems of perception, action and emotion. Explores this claim through readings, discussions, debates and embodied interactions, and considers implications of embodied cognition across areas of psychology and applications in education. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better; Credit is allowed for only PSY 432 or PSY 498 (Embodied Cognition) |
| PSY | 434 | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | 437 | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 441 | Cognitive Development | Experimental and theoretical literature in child development and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 443 | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | 444 | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 446 | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 447 | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 451 | Stereotyping, Prejudice, and Discrimination | Critical investigation of the processes underlying, and the factors contributing to, stereotyping, prejudice, and discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 458 | Group Dynamics | Theories and methods of group leadership, group effectiveness, communication within groups, and relations between groups and individual members. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 461 | Interpersonal Influence | Principles and procedures that affect the process of social influence; consideration of attitudinal, compliance-inducing, and perceptual influences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better; PSY 350 (PGS 350) or 351 with C or better |
| PSY | 462 | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 465 | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |
| PSY | 468 | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 470 | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 471 | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |

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| PSY | 472 | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-7 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): PSY 399 |
| PSY | 501 | Supervised Teaching | Experience in and examination of perspectives on teaching undergraduate psychology. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 512 | Advanced Learning | Principles and theories of learning, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 526 | Neuroanatomy | Covers the structure and function of the mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): graduate; Credit is allowed for only PSY 426 or PSY 526 |
| PSY | 528 | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 530 | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 531 | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 532 | Analysis of Multivariate Data | Matrix algebra for multivariate procedures, component and factor analysis, canonical and discriminant analysis, classification, MANOVA, logistic regression, hierarchical linear model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 533 | Structural Equation Modeling | Path analysis; exploratory and confirmatory factor analysis; recursive and nonrecursive latent variable models; mean and covariance structures; latent growth models. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 534 | Psychometric Methods | Theory and practice of psychological measurement using classical and modern test theories. Reliability assessment, test validation, test construction, test usage. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 535 | Cognitive Processes | Theoretical/empirical treatment of the human organism as a processor of information, including abstraction, memory structure, problem solving, and thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 536 | Statistical Methods in Prevention Research | Statistical methods used in prevention research including epidemiological methods, logistic regression, program effect estimation, estimation, and mediation analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 537 | Longitudinal Growth Modeling | Growth modeling methodology to describe individual variation in development over time. Employs multilevel and structural equation modeling frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 538 | Advanced Structural Equation Modeling | Mean and covariance structure analysis. Includes multiple-group modeling, two-level hierarchical modeling, longitudinal growth modeling, analysis with categorical outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 539 | Multilevel Models for Psychological Research | Multilevel (i.e., hierarchical linear) modeling, as described by Raudenbush and Bryk (2002) and others. Covers analytic strategies for analyzing a variety of different nested data structures (e.g., couples data, clients nested within group therapy settings, children nested within classrooms, longitudinal data). Covers two- and three-level models for cross-sectional and longitudinal data and also addresses related topics such as centering and estimation. Students perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 531; Credit is allowed for only PSY 539 or 591 (Multilevel Modeling) |

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| PSY | 540 | Missing Data Analysis | Covers analytic strategies for analyzing data with missing values, with a special emphasis on modern approaches for dealing with missing data, in particular maximum likelihood missing data handling and multiple imputation, maximum likelihood estimation and multiple imputation. Familiarizes students with missing data theory, traditional analysis methods (e.g., deleting incomplete cases, single imputation methods), maximum likelihood estimation, multiple imputation, planned missing data research designs, and the inclusion of auxiliary variables. Students learn how to perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 532. Credit is allowed for only PSY 540 or 591 (Missing Data) |
| PSY | 541 | Research in Cognitive Development | Theoretical and empirical issues in the study of children's knowledge and cognitive processes. Comparison of research in Piagetian and other traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 542 | Social Development | Reviews and critiques major issues in the area of social development. Covers theory, research, and content. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 550 | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 551 | Advanced Social Psychology | Continuation of PSY 550. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 554 | Item Response Theory | A collection of measurement models based on item response theory (IRT). The models express the probabilities of responses to test or questionnaire items as a function of latent respondent characteristics and item properties. IRT models form the basis for measurement in standardized educational testing, but generally are also now used in clinical, social and personality measurement in psychology, medicine and the social sciences. Assumptions underlying IRT models, methods of parameter estimation and fit evaluation. Also covers important applications of the models in computerized adaptive testing, the detection of measurement bias and multidimensional IRT. Uses several software tools useful in IRT modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 534; Credit is allowed for only PSY 554 or 591 (Item Response Theory) |
| PSY | 555 | Experimental and Quasi-Experimental Designs for Research | Reviews research techniques. Analyzes lab and field research; applications to specific topics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 572 | Psychological Assessment | Theory and research on assessment of personality, psychopathology, and intelligence; construction of psychological assessment instruments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 573 | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 574 | Psychotherapy | Detailed survey of the theoretical and empirical literature relating to verbal psychotherapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 576 | Dynamical Systems in Psychology | Analyzes patterns of behavior change in psychological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 578 | Developmental Psychopathology | Covers major theories and research related to the development of psychological disorders of childhood and adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 582 | Community Psychology | Community systems, intervention techniques, consultation models, history and current status of community mental health movement, and conceptualization of the roles of community psychologists in social system intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 550 | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 573 | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |

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| PSY | 306 | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 344 | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 360 | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 365 | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 369 | Biology of Human Sexuality | Biology of Human Sexuality | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; completed one semester of Biology |
| PSY | 370 | Interpersonal Relationships | Development of personal skills for competent functioning in interpersonal relationships across multiple social contexts. Principles of mental health adjustment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| PSY | 425 | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | 430 | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | 434 | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | 443 | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | 444 | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 446 | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 447 | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 453 | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | 462 | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 465 | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |
| PSY | 468 | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 470 | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PSY | 471 | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 472 | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | 473 | Psychology and Politics of Child Maltreatment | Examines psychological literature on child maltreatment in the context of development. Explores interactions between professionals responding to maltreatment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; PSY 230 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 475 | Multicultural Issues in Clinical Psychology | Discussion-based course that focuses on cross-cultural conceptions of mental illness, diagnosis and treatment approaches, and beliefs and practices of specific ethnocultural groups in the United States. Encourage students to critically think about diversity issues in clinical psychology, one's own attitudes, and culture and psychology more broadly. Students achieve these objectives through reading empirical articles and chapters; taking quizzes and exams; completing hands-on exercises, essays and other writing assignments; and actively participating in and facilitating class discussions. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only PSY 475 or 498 (Clinical Psychology: Multicultural Issues) |
| PSY | 480 | Cross-Cultural Social Psychology | Focuses on patterns of social behavior in individualistic and collectivistic cultures. Includes multidisciplinary research using qualitative and quantitative methodologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): PSY 101 (PGS 101) with C or better; PSY 350 (PGS 350) with a C or better |
| PSY | 482 | Social Influence and Consumer Behavior | Discusses social influence principles, emphasizing strategies employed by professionals that affect consumer behavior. Analyzes consumer defenses against manipulations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Prerequisite(s): PSY 399(PGS 399) with C or better |
| PSY | 515 | Quantitative Research Methodology and Statistics I | Introduces advanced experimental and quasi-experimental research design and analysis. Focuses on group-based design and univariate analysis of variance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Psychology MS student |
| PSY | 516 | Quantitative Research Methodology and Statistics II | Advanced experimental and quasi-experimental research design and analysis. Focuses on principles underlying linear regression and related statistical techniques. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 515 with B or better; Credit is allowed for only PSY 516 or 598 (Psychological Methods II) |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman; maximum 25 hours |
| PUB | 501 | Introduction to Scholarly Publishing | Introduces the purpose, organization, and operation of scholarly publishing, including its history, societal role, and current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PUB | 502 | Scholarly Editing | Publishing procedures, proofreading, and manuscript editing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 503 | Advanced Scholarly Editing | Advanced manuscript editing, acquisitions, developmental editing, and indexing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 510 | Research in Scholarly Publishing | Individual or group research projects on issues in scholarly publishing, including legal, economic, design, technological, and related topics. | N | REC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 580 | Practicum | | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 592 | Research | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | N | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUP | 190 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| PUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| PUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 200 | Cities in Cinema | Environmental, aesthetic, social, economic, political cultural, and other factors influencing global cities seen through films from around the world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & H & G | |
| PUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 301 | Introduction to Urban Planning | Theoretical and practical aspects of city planning. Interrelationships among physical planning, environment, government, and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| PUP | 361 | Planning Workshop I | Basic site planning and design techniques. Collection and analysis of information and basic planning research. Report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 with C or better; Minimum 45 hours |
| PUP | 363 | History of Planning | Historical overview of western urban and regional planning and planning theory, focusing on the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301 with C or better |

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| PUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 410 | Public Participation in Planning | Theory and practice of public participation in planning. Examines and critiques participation techniques and roles of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 412 | History of the City | The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as analytical essays and an in-depth research paper are required in addition to regular tests and quizzes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or HU) & H | Pre-requisites: Minimum 45 hours; Credit is allowed for only APH 414, MUD 598 (History of the City) or PUP 412 |
| PUP | 420 | Theory of Urban Design | Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU | Pre-requisite: PUP 301 with C or better |
| PUP | 424 | Planning Methods | Methods for urban planning research. Emphasizes research design, quantitative and qualitative methods, survey research, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: PUP 301 with C or better |
| PUP | 425 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301; Minimum 45 hours; Credit is allowed for only PUP 525 or 425 |
| PUP | 430 | Transportation Planning and the Environment | Overview of transportation planning from the perspective of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 432 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 433 | Zoning Ordinances, Subdivision Regulations, and Building Codes | Analyzes zoning ordinances, subdivision regulations, building codes, and other planning implementation techniques relative to local development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Senior student; PUP 301 with C or better |
| PUP | 434 | Economic Development Planning | Provides a broad overview of urban economic development planning in the U.S. This overview includes the role and goals of economic development planning in today's global information economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L or SB | Pre-requisite: PUP 301 with C or better |
| PUP | 436 | City Structure and Planning | Political structure and organization of government as it relates to planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 441 | Economics of Environmental Planning | Overview of environmental and ecological economics and how their concepts and tools are used in dealing with environmental planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better; Credit is allowed for only PUP 541 or PUP 441 |
| PUP | 442 | Environmental Planning | Environmental planning problems, including floodplains, water quality and quantity, solid and hazardous waste, air quality, landslides, and noise. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 444 | Preservation Planning | History, theory, and principles of historic preservation. Emphasizes legal framework and methods practiced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students. Credit is allowed for only PUP 527 or PUP 444 |
| PUP | 445 | Women and Environments | Examines the role women play in shaping the built environment; ways built/natural forms affect women's lives. Focuses on contemporary U.S. examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | C | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 452 | Ethics and Theory in Planning | Ethics and theory of professional planning practice in urban and regional communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisite: PUP 301 with C or better |
| PUP | 462 | Planning Workshop II | Comprehensive planning. Synthesis of complex data- and community-based analyses. Advanced report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 and PUP 361 with C or better |
| PUP | 465 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| PUP | 481 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |

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| PUP | 482 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 373 or GPH 481; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban Planning undergraduate student |
| PUP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| PUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| PUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| PUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 501 | Planning History and Theory | Comprehensive review of planning profession within a political, governmental, multicultural, and gender framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 515 | International Planning and Development | Introduces globalization, international development, international planning practices and policies, urbanization and urban and regional planning in developing nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 520 | Planning Practice, Ethics and Processes | Reviews past and current theoretical developments related to social change perspectives, the role and ethics of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 525 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 425 or 525 |
| PUP | 526 | Historic Preservation Planning Practice | In-depth study of practical applications of historic preservation theory and methods. Overview of the professional work of the preservation field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 527 | Preservation Planning | Explores the field of historic preservation. Overview of its historic development and the principles that guide its professional practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student. Credit is allowed for only PUP 444 or 527 |
| PUP | 531 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 535 or GPH 535 |
| PUP | 541 | Economics of Environmental Planning | Application and limitations of economics in environmental planning and policy making in the United States and internationally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 441 or 541 |

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| PUP | 542 | Environmental Administration and Planning | Environmental administration of policies and their relationship to environmental planning practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 544 | Urban Land Use Planning | Theory and methods of urban land use planning, including the rational planning process, comprehensive, functional, and neighborhood plans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only WST 547 or PUP 547 |
| PUP | 548 | Planning for Sustainable Communities | Theory and applications connecting sustainability sciences and practice to urban environmental planning. Sustainable urban development, restoration, and preservation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 550 | Transportation and the Environment | Examines transportation planning from the perspectives of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 553 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |
| PUP | 561 | Urban Design Workshop | Workshop course focuses on applying knowledge and skills in a "real world" setting, developing meaningful planning and design proposals for existing urban areas. | N | STO | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 562 | Advanced Theory of Urban Design | Study of urban design practice and underlying social, political, and environmental issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 563 | The Politics of Urban Space and Design | Advanced seminar critically examines major intellectual traditions investigating urban form, the production of urban space, and socio-spatial practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 565 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 465 or 565 |
| PUP | 571 | Socio-Economic Impact Analysis | Theory, methods, and techniques of demographic and economic analysis utilized in urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 573 | Survey Research and Multivariate Statistics | Methods of survey research design and primary data analysis for urban planning applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and PUP 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 575 | Environmental Impact Assessment | Criteria and methods for compliance with environmental laws; develops skills and techniques needed to prepare environmental impact statements/assessments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 576 | GIS Workshop for Planners | GIS as a tool to address large, multifaceted planning problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 577 | Communication and Visualization Tools in Planning | Covers graphic and verbal skills required to effectively communicate planning information and ideas. Emphasizes digital graphics and other computer-based tools and presentation formats, focusing on applying visual strategies and tools most often used by planners to make a persuasive argument. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 579 | Qualitative Research | Covers key qualitative skills and techniques that planners require, including research design and the understanding of validity and reliability issues, case study research approaches, qualitative data collection strategies, and strategies for analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUP | 581 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| PUP | 582 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 581; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Urban/Environmental Planning MUEP student |
| PUP | 585 | International Field Studies | Organized field study in specified international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485, GCU 586, GPH 485, GPH 585, LAP 485, LAP 585, POR 485, PUP 485 or PUP 585 |
| PUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate student |
| PUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 642 | Urban and Regional Economic Analysis | Land use and locational impact of economic activity and the urban real property market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 644 | Public Sector Planning | Urban fiscal problems and public goods provision in state and local governments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |

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| PUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | |
| PUP | 701 | Urban Planning Colloquium | Presents and discusses new research findings and methods in urban planning. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 710 | Current Planning Theory and Practice | Explores and critically evaluates planning theories and approaches with the objective of articulating new ideas for planning research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 718 | Econ Dev in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2-3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)/Credit is allowed for only LAW 718 or PUP 718 |
| PUP | 724 | Planning Methods for Doctoral Students | Tools useful for urban planning research; emphasis on research design and survey methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| PUP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| QBA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| QBA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-7 | | |
| QBA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Students only (degree and non-degree seeking) |
| QBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Degree Seeking Students only |
| QBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |

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| QBA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey Graduate Degree Seeking Students only |
| QBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | |
| QBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | |
| RDG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 291 | Children's Literature | Focuses on selecting and using children's literature and related nonprint media to support the elementary school curriculum. Covers the elements, genres and applications of children's literature as well as the resources available for elementary classroom teachers. Constructs criteria for the selection of trade books for educational and personal use. Also explores the role of digital media in children's literature. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | HU | |
| RDG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 322 | Language Literacy 1 in Elementary Schools | Instructional strategies for teaching reading using systematic research-based phonics to aid decoding; vocabulary; and comprehension development; writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |
| RDG | 323 | Literacy Processes in Content Areas | Principles and practices for planning subject matter units of instruction that explicitly address learning with texts across academic disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 413 | Language Literacy 2 in Elementary Schools | Applies literacy strategies, including instruction and diagnostic assessment, literacy lessons with adaptations for diverse learners, extended classroom experiences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RDG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| RDG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 505 | Developmental Reading | For classroom and special reading teachers. Specific professional skills in decoding, comprehension, and evaluation. Required for Special Reading Endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 507 | Content Area Literacy | Theory, teaching strategies, and practical application concerning learning from text across subject matter disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 508 | Essential Elements of Elementary Content Area Literacy (K-8) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 509 | Essential Elements of Secondary Content Area Literacy (6-12) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 512 | Theoretical Foundations in Language and Literacy | Introduces theoretical lenses useful in understanding issues in language and literacy education and research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 520 | Essential Elements of Elementary Literacy (K-8) | Intended for practicing teachers, focuses on the development of a comprehensive approach to Reading and Writing Instruction K-8. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 531 | Language and Literacy I | Instructional strategies for teaching reading using systematic, research-based phonics to aid decoding, vocabulary, comprehension development, writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College MEd or doctoral student; Credit is allowed for only RDG 531 or SPE 538 |
| RDG | 532 | Language and Literacy II | Applies literacy strategies including instruction and diagnostic assessment, literacy lessons with adaptations for diverse learners, and extended classroom experiences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 550 | Practicum Experiences in Elementary and Secondary Reading | Practicum experience utilizing assessment and instructional techniques for classroom settings. See RDG 557 for State of Arizona reading endorsement. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 555 | Formal Measures of Literacy | Understanding the attributes of standardized tests and applying this information to analyze, select, and explore their use. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 556 | Assessment and Procedures in Elementary and Secondary Reading | Techniques for classroom and clinical reading/literacy assessment and instruction. Emphasizes continuous assessment. May be taken concurrently with RDG 550 or 557. Recommended for State of Arizona reading endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 557 | Advanced Elementary and Secondary Reading Practicum | Advanced practicum experience utilizing specialized reading and other assessment and instruction techniques for classroom and clinic settings. Lab sections. Recommended for State of Arizona reading endorsement. May be taken concurrently with RDG 556. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 563 | Children's Literature | Selects and uses children's literature and related nonprint media to support the elementary school curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| REA | 300 | Real Estate Analysis | Applies economic theory and analytical techniques to real estate markets. Topics include law, finance, appraisal, market analysis, investments, development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS or BA student, OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. |
| REA | 380 | Real Estate Fundamentals | Real estate for the student/consumer with an emphasis on the applied aspects of each area of real estate specialization. Not open to Real Estate majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum cumulative GPA of 2.00; Minimum 56 hours OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| REA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| REA | 401 | Real Estate Appraisal | Factors affecting the value of real estate. Theory and practice of appraising and preparation of the appraisal report. Appraisal techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student. Credit is allowed for only LES or REA 411 |
| REA | 441 | Real Estate Land Development | Neighborhood and city growth. Municipal planning and zoning. Development of residential, commercial, industrial, and special purpose properties. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student |
| REA | 456 | Real Estate Investments | Analyzes investment decisions for various property types. Cash flow and rate of return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS or BA student, OR Non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree OR Graduate student. |
| REA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| REA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | |
| REA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| REA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 501 | Urban Economic and Real Estate Development Principles | Explores the basic principles of urban economics and their application to real estate decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| RED | 502 | Real Estate Valuation-Finance and Capital Markets | Addresses the concepts of valuation applied to real estate and teaches how to apply these principles. Intermediate- to advanced-level course in mortgage finance, and associated capital market innovations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 691-Real Estate Fin/Analysis or RED 502 |
| RED | 503 | Real Estate Market Analysis | Focuses on market analysis and market data gathering methods, means, and techniques necessary in identifying market opportunities and developing specific market strategies for successful real estate development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 503 or 591 (Real Est Site Analys/Dsg) |
| RED | 504 | Real Estate Site Analysis, Master Planning and Design | Analyzes the physical characteristics of a property, including the site and physical area, legal, political, economic, and financial facts that impact the highest and best use of a property and what can be built upon the property. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 504 or 591 (Real Estate Develop Principles) |
| RED | 505 | Land Use Law and Public Entitlement Process | Covers a basic understanding of the legal and practical zoning and governmental land entitlement process. Examines the legal history, structure, and implications of zoning, as well as the fundamentals of "real life" situations that occur in the entitlement and real estate development field. Provides a broad overview of this process from a legal and development viewpoint, but is not intended to be a comprehensive analysis of all entitlement issues. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 505 or 591 (Mkt Segmentation/Analysis) |
| RED | 506 | Real Estate Law for Developers | Covers the nature of property and the legal system as it relates to purchase agreements, title, surveys, declarations of covenants, defining easements, and licenses among other related topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 506 or 591 (Public Entitlement Process) |
| RED | 507 | Synthesis Project #1 Residential Development | Employs the students learning through application of developing a specific parcel of land. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for RED 507 or 591 (Mkt Segmentation/Analysis) |
| RED | 508 | Real Estate Engineering and Construction | Explores the basic principles of engineering and construction of real estate development projects. Reviews construction technologies within the framework of architectural design and engineering as well as construction means, methods, and systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 508 or 598 (Compar Analys; in Fill Housing) |
| RED | 509 | Advanced Financial Analysis for Commercial Real Estate | Teaches more complex financial analysis of income-producing property, including various decision-making tools such as Monte Carlo, option pricing, assessing alternatives, and how to build these into financial models. Also teaches financial analysis of business structures to determine potential outcomes such as debt and equity structures, waterfalls, claw backs, and other business and ownership concepts. Emphasizes strategic alternatives, assessing risk and conversion events. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 509 or 691 (Contemp Issues Real Estate Dev) |
| RED | 510 | Real Estate Development Business and Project Management | Teaches management of real estate development companies and process. Students learn the various aspects of project management, financial management and project accounting, lending relations and managing loans and pay applications as well as dispute resolution and strategic partnerships. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 510 or 598 (Income Analys; Comm/Retail) |
| RED | 511 | Design of the Built Environment | Teaches the built environment and how that applies to creation of places, market positioning, capturing value and the importance of good design to the business of real estate. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 511 or 691 (Real Estate Dev Project Mgmt) |
| RED | 512 | Real Estate Law for Developers | Teaches issues faced by developers such as various types of financing structures, including special districts, TIF and bond financing. Covers issues and process of raising capital and various forms of securing equity. Discusses private placement memorandums, limited liability companies, partnerships and public private partnerships. Students also learn about environmental law, income tax issues, negotiation, and alternative dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 512 or 691 (Adv Real Estate Finance/Analys) |
| RED | 513 | Advanced Real Estate Engineering, Construction Management and Sustainable D 2 | Covers various construction delivery methods, construction project management and scheduling, construction contracts, mechanics and materialmen's liens, and pay applications. Students also learn about sustainability and the built environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Real Estate Dev. Project Mgmt) |
| RED | 514 | Synthesis Project #2 Income Property Development | Through application to a specific problem given by faculty, students work in teams to analyze and seek solutions to development of land for an income-producing property. Students investigate a specific parcel of land, performing due diligence, preparing a market and segmentation analysis, defining highest and best use(s), designing a solution, preparing residual land value analysis, defining a product offering, pricing points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Adv Real Estate Finance/Analys) |
| RED | 515 | Synthesis Project #3 Capstone Project Mixed-Use Property Development | Employs all that the students have learned through application to a specific problem given by faculty. Students work in a team to analyze and seek solutions to development of land for a complex, mixed-use project. Students investigate a specific parcel of land and are required to perform due diligence, prepare a market and segmentation analysis, define highest and best use(s), design a solution, prepare residual land value analysis, define a product offering, price points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 4 | | Pre-requisite: Master of Real Estate Development major; Credit is allowed for only RED 515 or 598 (Ret Analys; High Dens Mix Use) |

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| RED | 520 | Real Estate Development Business and Project Management Internship | Integrates the knowledge and skills cultivated in the MRED program (real estate business management, creative problem solving, team building, critical analysis and thinking). Helps students secure relevant functional and industry experience by providing hands-on work experience across a variety of internship sites demonstrating the varied and changing demands and possibilities of work within the real estate industry. Uses internship experiences to analyze the shifting landscape of work and to assess potential employment environments and career paths. | N | PRA | N | YGB | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student |
| RED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| RED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | 270 | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 369 | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| REL | 371 | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | 374 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| REL | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 111 or REL 111 |
| REL | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the biblical text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| REL | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better. Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| REL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| REL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 205 | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Credit is allowed for only JST 210 or REL 210 |
| REL | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |
| REL | 225 | African American Religion | Introduces the history and development of the African American religious tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |

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| REL | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| REL | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| REL | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| REL | 260 | Introduction to Islam | Examines Islamic beliefs, ceremonies, festivals, and institutions. Assumes no prior knowledge about Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 270 | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 282 | PreHispanic Native Am Wrlidview | Surveys cosmological traditions of indigenous civilizations on the Pre-Columbian American continents | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 301 | Comparative Mysticism | Comparative examination of Eastern and Western mystical traditions from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 307 | Approaches to Religion | Examines the intellectual history of academic study of religion through various theoretical approaches, major themes, and thinkers. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Religious Studies student; ENG 102, 105 or 108 with C or better; REL 207 with C or better |
| REL | 310 | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 311 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better. Credit is allowed for only HEB 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| REL | 312 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| REL | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| REL | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| REL | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 317 or REL 317 |
| REL | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| REL | 319 | Religion, Violence and America | In-depth study of ways in which religion and violence have shaped American history, culture and identity. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 319 or 394 (Religion, Violence & America) |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (Indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |

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| REL | 323 | African American Religion: A Biographical Approach | Examines the experiences, motivations, and contributions of a number of figures associated with African American religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 324 | Spirituals and the Blues | Multidisciplinary exploration of the African American religious and musical response to the North American diaspora experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 326 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only TCL 328 or REL 326 |
| REL | 330 | Native American Religious Traditions | Presents world views and religious thought through the art, architecture, literature, music, mythology, ritual, and folklore of representative tribes in North America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 331 | History of Native American Religious Traditions | Role of religion in Native American history, including missionization; religious adaptation; and prophetic, messianic, and religious revitalization movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 332 | South American Indian Religions | Introduces the sacred stories, ceremonies, and beliefs of Native South American peoples in their historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 381 or REL 332 |
| REL | 338 | The Daoist Bible: Daode jing | At 5,000 words, the Daode Jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| REL | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only CHI or REL 343 |
| REL | 344 | Religion and Values in Japanese Life | Japanese values expressed in the life and annual cycles of the family, local and national identities, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 345 | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 346 | Chinese Religions | Examines the history and practices of Chinese religions with particular attention to culture, society, and history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 347 | Religious Pluralism and Conflict in India | In-depth analysis of major Indian religious traditions in historical and contemporary context, with attention to theologues, textual genres, doctrines, rituals, political and cultural expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 24 hours. Credit is allowed for only REL 347 or REL 394 (Religions of India) |
| REL | 350 | Hinduism | Studies diverse forms of Hinduism through its institutions, literature, folklore, art, and architecture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 351 | Buddhism | Doctrines, practices, and institutions of the Buddhist religion, emphasizing its role in the history and culture of Asian societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 352 | Modern Buddhism | Focuses on modern issues related to Buddhism with special attention to colonialism, nationalism, the development of the nation-state and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 352 or 394 (Modern Buddhism) |
| REL | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 353 or REL 353 |
| REL | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity; Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 354 or REL 354 |
| REL | 355 | Japanese Cities and Cultures to 1800 | Relations among ideas and literary, visual, and performing arts of the ancient aristocracy, medieval samurai, and early modern townspeople. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 356 | Buddhism in America | Examines diverse Buddhist traditions in the U.S. among Asian-American communities and converts to this religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 357 | Theravada Buddhism in South and Southeast Asia | Examines Theravada Buddhist institutions, practices, and communities in ancient and contemporary south and southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 360 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| REL | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| REL | 362 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 363 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| REL | 364 | Islam in Eurasia and Central Asia | Examines the changing role of Islam in Eurasia and Central Asia through history and interprets current transformations in the region. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 364 or 394 (Islam in Eurasia & Central Asia) |
| REL | 365 | Islamic Civilization | Global historical survey of Islamic cultures and societies up to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better |
| REL | 366 | Islam in the Modern World | Examines the worldwide transformations of Islamic religion, cultures, and societies in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 369 | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 371 | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 372 | Formation of the Christian Tradition | Origins, development, and expansion of Christianity; major themes and tensions from the New Testament world to the beginning of the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 373 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better or WST 100 or WST 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| REL | 374 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | 375 | Lost Scriptures, Lost Christianities | Wide diversity of early Christianity and its suppressed and lost texts, which have been found in modern times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS 376 or REL 376 |
| REL | 377 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only HST 371 or REL 377 |
| REL | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| REL | 379 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 379 or SGS 343 |
| REL | 380 | Theology of Terror | Historical background, theological foundations, and consequences of violent Islamist movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 382 | Magick, Religion and Science | Relationship and conflict among magic, religion and science in the West from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| REL | 385 | Contemporary Western Religious Thought | Introduces contemporary Jewish and Christian thought. Topics include religion and politics, problem of evil, interpretations of God, and feminist theology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 386 | America and the Holocaust | Analyzes the historical and sociopolitical factors that shaped U.S. policy decisions regarding Germany's assault on Europe's Jews. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |
| REL | 387 | Religion and Conflict: Theories and Cases | In-depth study of religion and conflict across multiple traditions and regions. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 24 hours; Credit is allowed for only REL 387 or 394 (Religion and Conflict: Theories and Cases) |
| REL | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| REL | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | 393 | Religion and Sexuality | Examines what issues are involved in incorporating sexuality into religion and how/why religious traditions seek to control sexuality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |

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| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395. |
| REL | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better. Credit is allowed for only JST or REL 396 |
| REL | 405 | Problems in Religious Studies | Selected topics in religious studies; involves students in research interests of instructor. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: REL 307 with C or better; Religious Studies major |
| REL | 406 | Religious Studies Capstone I | Develops skills necessary for conducting and presenting in-depth research in the field of religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Prerequisite(s): REL 307 with C or better; Religious Studies major; senior standing |
| REL | 407 | Religious Studies Capstone II | Uses previously developed research to produce original research project in religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 2 | | Prerequisite(s): REL 406 |
| REL | 410 | Judaism in Modern Times | Variety of expressions of Judaism and Jewishness in the modern period. Topics may include American Judaism or religious responses to the Holocaust. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 420 | Religion in American Life and Thought | Influence of religion on American society, culture, and ideas; the distinctive character of religion in America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 427 | American Religious Thought | Thought of representative American religious thinkers, e.g., Jonathon Edwards, William Ellery Channing, Horace Bushnell, and Reinhold Niebuhr. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 430 | Shamans and Mesoamerica | Analyzes process of religious hybridization in Mesoamerica; examines symbolic interpretations of Amerindian religious practice and cosmological concepts of Mesoamerican priests. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| REL | 460 | Studies in Islamic Religion | Issues in the interpretation and understanding of Islamic texts, history, society, culture, and rituals. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 461 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| REL | 470 | Religion in the Middle Ages | Religious aspects of medieval life and thought; variety of forms of dissent, heresy, and reform movements from the 4th to 13th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 471 | Reformation and Modern Christianity | Protestant Reformation to contemporary Christian movements; includes factors in the dissolution of the Medieval Christian synthesis, variety of reform movements and reformation patterns, Catholic counter-reform measures, formation of liberal theology, ecumenical movement, and the World Council of Churches. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 480 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| REL | 482 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only JUS 473, POS 473 or REL 482 |
| REL | 483 | Religion and Science | Investigates the correlation between science and religion as an interdisciplinary study from a historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| REL | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| REL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |

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| REL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| REL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 501 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on classical texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 502 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on contemporary texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 585 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary post/secular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3-9 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only MAS, PHI 550 or REL 585 |
| REL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 603 | Teaching World Religions | Seminar designed to prepare participants to teach a course similar to ASU's REL 100. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Phd or Masters student in Religious Studies |
| REL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

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| REL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| REL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| REL | 205 | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 300 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| REL | 310 | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 345 | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 401, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 490 | Senior Thesis | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| REL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| REL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| REL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| REL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| REL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ROM | 101 | Elementary Romanian | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 201 | Intermediate Romanian | Continuation of ROM 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 313 | Romanian Composition and Conversation | Develops skills in written Romanian and correct oral expression. Must be taken in sequence with ROM 314. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 201 |
| ROM | 314 | Romanian Composition and Conversation | Continuation of ROM 313. Develops skills in written Romanian and correct oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 313 |
| ROM | 411 | Advanced Spoken and Written Romanian I | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314 with C or better |
| ROM | 412 | Advanced Spoken and Written Romanian II | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314, & ROM 411 with C or better |
| ROM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ROM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ROM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ROM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 101 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 102 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| RUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 201 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 202 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 211 | Basic Russian Conversation | Intensive aural/oral drill to supplement reading and grammatical skills acquired in RUS 101, 102, 201, and 202. Required of Russian majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 212 | Basic Russian Conversation | See RUS 211. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 311 | Russian Composition and Conversation | Develops writing ability and oral expression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 312 | Russian Composition and Conversation | See RUS 311. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 321 | Foundations of Russian Literature | An in-depth study from Early Kievan religious writings and the medieval epic "The Lay of Igor's Host", to folklore and 18th Century literary movements in prose, poetry and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 322 | Scandals and Scoundrels: The Nineteenth-Century Russian Novel | An in-depth study of the Golden Age of Russian literature, including novels of Pushkin, Lermontov, Gogol, Khvoschinskaia, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinov'eva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskaiia, and other writers. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105 or 108; Credit is allowed for only RUS or SLC 323 |
| RUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 411 | Advanced Composition and Conversation I | Improves aural discrimination and self-expression in oral and written skills, emphasizing vocabulary building. Subject materials drawn from current post-Soviet-Russian publications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 412 | Advanced Composition and Conversation II | See RUS 411. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 421 | Pushkin | Pushkin's poetry, plays, and prose fiction, including Eugene Onegin, The Little Tragedies, Tales of Belkin, Queen of Spades and The Captain's Daughter. Taught in English. Does not satisfy the Liberal Arts and Sciences language requirement for BA degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | |
| RUS | 423 | Dostoevsky and Tolstoy | An in-depth study of Dostoevsky's and Tolstoy's major works, including "Crime and Punishment", "Brothers Karamazov", and "Anna Karenina". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 424 | Tolstoy and War and Peace in Russian Literature and Cinema | In English, course includes Tolstoy's War and Peace, the Sebastopol Tales, and Hadji Murad; Babel's Red Cavalry (Russian Civil War); and classic films of War and Peace, World War II, and the war in the Caucasus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better |
| RUS | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| RUS | 430 | Russian Short Story | Detailed study of representative works of the Russian short story genre. Includes authors from both Imperial and Soviet Russia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: RUS 312 with C or better |
| RUS | 440 | Russian Mass Media | Explores various aspects of modern Russian life through printed mass media, especially Internet media sources, and helps to develop advanced spoken, listening, reading and written skills in Russian. Students work with live television news broadcasts and investigate the most important general sources of electronic information, including electronic newspapers and the main Russian Web sites on a wide range of issues such as culture and the arts, government and politics, business and economics, armed conflicts, and accidents and catastrophes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): RUS 211; 212 with C or better. Credit is allowed for only RUS 440 or RUS 494 (Russian Mass Media) |

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| RUS | 441 | Survey of Russian Culture | Interplay of artistic, social, and political forces in the development of Russian culture from the Kievan period to the present. Exclusive use of Russian language source materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: RUS 312 with C or better |
| RUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| RUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 495 | Russian for Heritage Speakers | Generates professional proficiency by developing advanced communicative and written competency in standard literary Russian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |
| RUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| RUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| RUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SAO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| SAO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 196 | Study Abroad Office Placeholder | Reserved for undergraduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated by SAO following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program"; participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to an ASU Study Abroad Office program is required. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Office of the Provost | Office of the Provost | 1-12 | | |
| SAO | 494 | International Program Courses | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |

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| SAO | 596 | Study Abroad Office Placeholder | Reserved for graduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 9 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program", participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to a Study Abroad program is required. | N | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 598 | International Program Courses | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SBS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 200 | Introduction to Social and Behavioral Sciences | Overview of the social and behavioral sciences, indicating their contributions to society and emphasizing interdisciplinary integration | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SBS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 301 | Cultural Diversity | Critical analysis of the complexities of the cultural politics of difference in the contemporary United States. Through interdisciplinary and comparative study, examines a range of theoretical and public/popular cultural discourses about the cultural contributions, experiences, perspectives of, by, and about U.S. residents of diverse racial, ethnic, class, gender, sexual, and transnational origins or identities. Analyzes the social conditions and historical precedents that have shaped current diversity concepts and debates, deepening knowledge and understanding of multiple perspectives on these issues and their relevance to social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & C | Pre-requisites: Minimum Junior standing; ENG 102, 105 or 108 with C or better |
| SBS | 302 | Qualitative Methods | Basic methodological issues in the systematic application of qualitative analysis of human social life. Surveys range of qualitative methods used by social and behavioral scientists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 303 | Quantitative Methods | Concepts underlying design and implementation of quantitative research methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 304 | Social Statistics I | Statistical techniques of the social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | |
| SBS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SBS | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| SBS | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB, POS, SBS or SOC 374 |
| SBS | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretive analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SBS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 404 | Social Statistics II: Multivariate Analysis | Analysis of variance, multiple regression, dummy variable regression, path analysis, and related topics. Computer application to problem solving. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Pre-requisites: SBS 303 with C or better; SBS 304 with C or better |
| SBS | 410 | Topics in Identity/Difference | Topics which focus on race/ethnic, gender, sexual or cultural identity/difference. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 430 | Topics in Power/Knowledge | Selected topics concerning the effects of political and social institutions on perceptions of politics and political culture. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 440 | Family Studies | Theoretical frameworks for analyzing the development of family systems. Impact of social and economic conditions on family forms. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SBS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, POS or SBS 447 |
| SBS | 450 | Topics in Local/Global | Examines links among social, political, economic changes at local, national, global levels. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 460 | Urban Studies | Studies local and global urban issues such as social geography, political economy, culture and social space, urban social diversity. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 442 or SBS 460 |
| SBS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| SBS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SBS | 490 | Senior Thesis I | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. First part of a six-semester-hour sequence, followed by SBS 491. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 491 | Senior Thesis II | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. Second part of a six-semester-hour sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SBS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SBS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| SBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SBS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SCM | 300 | Global Supply Operations | Resources and information to create and deliver products globally. Interfirm systems and industry supply chains. Customer, producer, and employee perspectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prereq(s): WPC or Nonbus major: ACC 241, 240, 242, 271; CIS 105, 220, 236, CON 251, CSE 100, 180; ECN 221, 231, IEE 380, STP 280; MAT 211, 271; min 2.50 GPA OR Engrng Mgmt major: ACC 241; CSE 110; IEE 380; MAT 266 w/ min C; Credit for OPM 301 or SCM 300 |
| SCM | 301 | Introduction to Modern Global Supply Chain Management | Examines the purchasing, operations, and logistics functions from the customer, producer, and employer perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): non-Business major; minimum 2.00 ASU cumulative GPA; minimum 56 earned hours. Credit is allowed for only SCM 300 or SCM 301 |
| SCM | 303 | Honors Global Supply Operations | Explores the principles, concepts, and tools of supply chain management, with emphasis on how these are applied in the business world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey School of Business Honors student; ACC 241 or ACC 242 or ACC 271, and ECN 221 or ECN 231 with C or better |
| SCM | 314 | Analytics for Logistics | Focuses on practical tools for real-world decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; SCM 300 or SCM 303 with C or better |
| SCM | 315 | Business Decision Models | Introduces quantitative tools used to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 300 or SCM 303 with C or better |
| SCM | 344 | Applied Logistics Management | Presents a synthesis of the principles in logistics (and supply chain) activities emphasizing the operation and integration of activities such as transportation, inventory, warehousing, facility location, customer service, packaging and materials handling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre- or corequisite(s): SCM 314 with C or better if completed |
| SCM | 345 | Logistics Management | Logistics and supply chain activities emphasizing integration of transportation, inventory, warehousing, facility location, customer service, packaging, and materials handling. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite: W.P. Carey BS Supply Chain Management major; Pre/Corequisites: SCM 315 with C or better if completed |
| SCM | 354 | Procurement of Services | Management of the supply function for logistics-based organizations. Allows students to better understand the nature of procuring a service, contracting that service and establishing appropriate performance metrics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): SCM 300 or SCM 303 with C or better |
| SCM | 355 | Supply Management | Management of the supply function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 300 or 303 with C or better |

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| SCM | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): minimum 60 hours; SCM 300 or SOS 110 with C or better; Credit is allowed for only SCM or SOS 385 |
| SCM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| SCM | 432 | Planning and Control Systems for Supply Chain Management | Planning and control systems for product and service flows in supply chain: production planning, master scheduling, MRP, ERP, inventory management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 345 with C or better; Pre/Co-requisite: SCM 355 |
| SCM | 440 | Quality Management/Measurement | Quality management and measurement, relationships with suppliers and customers, quality awards, certifications, programs, tools for process improvement and cost analyses. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey BA Business (Retail Management) or BS Supply Chain Management major; SCM 300 or SCM 303 with C or better |
| SCM | 445 | Advanced Logistics Management | Logistics processes account for approximately 10% of U.S. GDP; therefore, the efficient and effective execution of these processes is critical to supply chain managers in corporations, government entities and nonprofit organizations. Includes an overview of the processes involved, a survey of the institutions and players in the processes, and the analytical tools to evaluate their efficiency and effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): SCM 344 with C or better |
| SCM | 455 | Research and Negotiation | Current philosophy, methods, techniques for conducting strategic and tactical supply chain research and negotiations. Includes supplier price and cost analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 355 with a grade of C or greater |
| SCM | 463 | Global Supply Chain Management | Supply chain activities in international business with special emphasis on management of transportation, global sourcing, customs issues, and facility location in a global environment. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | G | Pre-requisites: W.P. Carey BS or BA student; SCM 300 or SCM 303 with C or better |
| SCM | 479 | Supply Chain Strategy | Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise systems. Provides a comprehensive perspective of supply chain management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 432 with a grade of C or greater |
| SCM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SCM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SCM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisite(s): Minimum 60 hours |
| SCM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| SCM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| SCM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| SCM | 502 | Operations and Supply Management | Contemporary management issues, including environmental, project, and supply chain management; new product development; quality control; TQM. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey MBA students |
| SCM | 511 | Integrated Supply Chain Management | Management of sourcing, operations, and logistics as an integrated process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 515 | Decision Models for Supply Chain Management | Decision modeling approaches for supply chain management such as optimization, simulation, and decision analysis. Emphasizes spreadsheet-oriented approaches. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 516 | Introduction to Applied Analytics | Provides a solid foundation and deeper understanding of the use of quantitative modeling tools and techniques to solve problems faced in modern supply chains. Uses Excel workbooks to implement the appropriate quantitative methods, including forecasting demand, determining the capacity of a manufacturing line and the cycle times of parts being processed on the line, and methods to manage inventory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |

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| SCM | 517 | Data-Driven Quality Management | Addresses the use of analytics tools and techniques to enhance the ability of quality management approaches to improve processes. Introduces modern quality management approaches including six sigma and design for six sigma. Covers the define, measure, analyze, improve and control (DMAIC) improvement cycle; the core process used to drive six sigma projects. DMAIC refers to a data-driven improvement cycle used for improving, optimizing and stabilizing business processes and designs. Provides an analytics roadmap to help users work through the DMAIC problem-solving process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 518 | Analytic Decision-Making Tools I | Covers the skills and knowledge necessary for mastery of the use of quantitative modeling tools and techniques to support a variety of business decisions. Deterministic optimization techniques, including linear programming, nonlinear programming, integer programming, network models and a brief introduction to metaheuristics. Covers the use of these models for a variety of common business problems. Requires implementation of these models using Excel and standalone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 519 | Analytic Decision-Making Tools II | Addresses the skills and knowledge necessary to model situations where uncertainty is an important factor. Covers models including decision trees, queuing theory, Monte Carlo simulation, discrete event simulation and stochastic optimization. Uses these models for a variety of common business problems. Requires implementation of these models using Excel and stand alone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). Describes each of these methods in detail. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 520 | Strategic Procurement | Applies the principles, philosophies, and processes of supply management to the purchasing management process on a global basis and to facilitate the continuous improvement of the purchasing management system. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 502 with C or better |
| SCM | 521 | Supply Management and Negotiation | Selecting, developing, and executing appropriate sourcing strategies and processes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 532 | Supply Chain Cost and Design Issues | Strategic design and development of supply chains. Focus on cost-management tools applied to supply chain design and supplier management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 541 | Logistics in the Supply Chain | Critical issues for customer perception of supply chain performance, including inventory planning, transportation, warehousing, information technology, and integrated logistics service. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 542 | Logistics, Globalization, and Economic Development | Global trade, global networks and the influence those networks have on economic development worldwide. Exposes geographic, economic and sociopolitical perspectives on these issues and invites students to draw conclusions from an increasingly informed perspective. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502 and 541; Co-requisite: SCM 515 |
| SCM | 545 | Cases in Global Logistics | Capstone experience for students in the MS in Global Logistics program. Synthesizes learnings from previous courses and applies this learning to specific issues that have a major global logistics component. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502, 515, 541 and 542 |
| SCM | 551 | Operations Planning and Execution | Managing the conversion of raw materials to finished goods, including scheduling, work-in-process inventory management, and postponement/customization. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 581 | Management of Technology and Innovation | Technology life cycles, technology forecasting, new product development process, innovation teams, innovation best practices. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 587 | Project Management | Planning, scheduling, and controlling of projects in R & D, manufacturing, construction, and services. Project selection, financial considerations, and resource management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |

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| SCM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | N | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | |
| SCM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |
| SCN | 250 | Physical Science by Inquiry | Laboratory-based development of concepts and reasoning skills in the physical sciences. Emphasizes open-ended investigations, dialogues between the instructor and individual students, and small group discussions. Helps students think of physical science as an active process of discovery in which they can participate. Helps preservice teachers understand inquiry and develop inquiry skills. Liberal arts students gain experience in the scientific process. Useful for students who wish to improve their science preparation before taking further science courses. Forms foundation for scientific literacy. | N | LAB | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | SQ | Credit is allowed for only SCN 250 or 294 (Physical Science by Inquiry) |
| SCN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 300 | Foundations of Environmental Education | Introduces environmental education, including the philosophy, historical development, resource identification, curriculum development, field trips and other activities designed to provide the structure and development of the field of environmental education. Explores the antecedents to the present-day field and connects the field of environmental education to curricular programs that are an outgrowth of perceived and actual need in the field of environmental education. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 301 | Ecology and Natural History of the Sonoran Desert | Overview of the plants, animals, and geology of the desert ecosystem based on the Arizona K-12 Science Standards. Provides students with basic knowledge of the Sonoran Desert characteristics and its relationship to the total school curriculum. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 302 | Outdoor Education | Develops a meaningful framework for those who wish to enhance their skills in teaching about outdoor education and personal knowledge of the desert. Whether it be for personal challenge, leadership training or professional certification, outdoor education offers all participants the experience, inspiration and encouragement to live more sustainable lifestyles. The best thing you can do for the natural environment is to discover it then show it to others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 303 | Environmental Education Internship | Provides opportunities to learn more about natural sciences and local history; outdoor education and field trip course facilitation and training; individual and group development; facility care and maintenance including landscaping, gardening and carpentry; and the restoration and maintenance of the grounds and teaching materials. Supports and/or develops education projects and programs as outlined by the locations' Educational Outreach office. Various other tasks include: field trip coordination, development of curriculum and classroom materials, hands-on fieldwork, school outreach, off-site outreach events support, and Outdoor Education event support. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): Minimum 45 hours |
| SCN | 304 | Sonoran Desert Flora | Plants and plant communities support much of the diversity of life in the Sonoran Desert and the surrounding regions. Covers the fundamentals of ecology from the perspective of plants including population, community and ecosystem ecology. Also includes identification and classification of plants and plant communities in the Sonoran Desert region. Incorporates practical field exercises designed to acquaint the student with plant community analysis, classification and description. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours |
| SCN | 305 | Tropical Ecosystems of Costa Rica | To better understand the astonishing diversity of tropical ecosystems students work together to investigate the ecology and cultures of neotropical ecosystems: how they were formed and how they are changing. Introduces students to language, culture and society of people and communities in Costa Rica. Students also examine their own cultural perspectives and beliefs. Focuses on four areas: (1) background on history and present-day society of Costa Rica, introductory conversational Spanish for interacting with Costa Ricans; (2) living in Costa Rica, community, family and education: visiting families and private and public schools; (3) debriefing and reflecting on Costa Rican language and culture; and (4) the location of Costa Rica, the rainforests' impact on the world, climate, cultures and contributions to science. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SCN 305 or SCN 494 (Tropical Ecosystems of Costa Rica) |

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| SCN | 307 | Learning from Nature: Biomimicry and STEM | Introduces biomimicry, an emerging discipline that seeks to learn from nature to solve human problems. "Biomimicry" (from bios, meaning life, and mimesis, meaning to imitate) is a new discipline that studies nature's best ideas and then imitates these designs and processes to solve human problems. With an emphasis on getting outside and exploring the land around, focuses on observing, appreciating and learning from nature and natural systems in our local environment. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SCN 307 or SCN 494 (Learning from Nature: Biomimicry & STEM) |
| SCN | 400 | Sustainability Science for Teachers | Explores the challenges of sustaining human health and well-being on Earth due to human exploitation of natural resources. Seeks sustainable solutions through science, technology and society acting at global and local levels. Covers diverse approaches used by scientists, scholars and practitioners to study and assess human-environment interactions pertaining to sustainability challenges and solutions. Focuses on how to teach sustainability concepts in the K-8 classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only SCN 400 or SCN 401 or SCN 494 (Sustainability for the Elementary Teacher) |
| SCN | 401 | Sustainability Science, Technology, and Society | Explores the challenges of sustaining human health and well-being on Earth due to human exploitation of natural resources. Prepares students to think and engage critically with the world around them. Seeks sustainable solutions through science, technology and society acting at global and local levels. Uncovers diverse approaches used by scientists, scholars and practitioners to study and assess human-environment interactions pertaining to sustainability challenges and solutions. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only SCN 400 or SCN 401 or SCN 494 (Sustainability Science, Technology, and Society) |
| SCN | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SCN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SCN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| SCN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 3 | | Prerequisites: Graduate Engineering major; credit is allowed for only MAE 588 or SEC 588 |
| SEC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-12 | | |
| SEC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-12 | | |
| SEC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-4 | | |
| SEC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter,Transport & Enrgy | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SEC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report or publication. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 784 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| SED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 322 | Classroom Leadership in Secondary Schools | Theories and practices for managing and maintaining secondary classrooms for learning; strategies for home/school communication; and leadership roles for teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 396 | Clinical Experience I | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 397 | Clinical Experience II | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 464 | Middle-School Curr/Org | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 478 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 480 | Special Methods of Teaching Social Studies | Interdisciplinary approaches; production and collection of materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 481 | English Teaching Methods for Secondary Schools | Instructional, organizational, and presentation methods for English in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 482 | Science Teaching Methods for Secondary Schools | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 496 | Clinical Experience III | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| SED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 501 | Introduction to Effective Instruction | Introductory course for certification program in secondary education. Emphasizes developing basic classroom management, instruction, and evaluation. Includes a field assignment of at least 120 hours. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 511 | English/Language Arts Teaching Methods in Secondary School | Instructional, organizational, and presentation methods. This course, which focuses on the general content and pedagogy of Secondary English/Language Arts, is aligned directly with the State of Arizona Professional Teaching Standards and NCTE standards for teaching secondary English. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 512 | Math Teaching Methods for Secondary Schools | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 513 | Science Teaching Methods for Secondary School | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. This course, which focuses on the general content and pedagogy of secondary science, is aligned directly with the State of Arizona Professional Teaching Standards and INTASC Principals. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 520 | Science Methods for Early Adolescence | Examines the interrelationships between theory and practice in teaching science. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 522 | Secondary School Curriculum Development | Social processes, issues, principles, patterns, and procedures in curriculum development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| SED | 533 | Middle/Secondary Instruction, Management, and Assessment | Analyses of procedures, methods, techniques, and experiments in teaching in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Must be a graduate student |
| SED | 544 | Creating Classroom Climates | Emphasizes classroom management and instructional strategies for establishing positive classroom climates that facilitate learning. Includes field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 547 | Teaching Mathematics in the Middle Grades (5-9) | Strategies and methodologies to teach mathematics in the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 560 | Teaching Mathematics with Technology | Strategies and methodologies to teach mathematics with technology, focusing mainly on the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 561 | Teaching Science with Technology | Strategies and methodologies for effective technology-enhanced science classrooms and improved learning. Models student-driven inquiry teaching throughout the course. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 567 | Clinical Experience I | The teaching internship or clinical experience is the occasion for the student to become an active member of the teaching profession. This tremendous learning opportunity requires commitment, reflection, time and effort. Challenges students to develop subject area knowledge; ability to collaborate with colleagues and parents; understanding of pre K-12 students as people with social, emotional and intellectual needs. Also challenges ability to plan and conduct learning experiences with students; ability to assess learning and program outcomes; and ability to improve, through thoughtful questioning and analysis, their own instructional decisions while developing their own ideas about the structure of schooling, field of education, and the nature of learning. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 576 | Clinical Experience II | The teaching internship or clinical experience is the occasion for the student to become an active member of the teaching profession. This tremendous learning opportunity requires commitment, reflection, time and effort. Challenges students to develop subject area knowledge; ability to collaborate with colleagues and parents; understanding of pre K-12 students as people with social, emotional and intellectual needs. Also challenges ability to plan and conduct learning experiences with students; ability to assess learning and program outcomes; and ability to improve, through thoughtful questioning and analysis, their own instructional decisions while developing their own ideas about the structure of schooling, field of education, and the nature of learning. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 578 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. Postbaccalaureate students only. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SED | 579 | Apprentice Teaching in Secondary Education | Apprentice teaching in secondary school classrooms. Must be taken four times for a total of 9 semester hours. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

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| SED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| SEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SEM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |
| SER | 101 | Introduction to Engineering Design I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Credit is allowed for only SER 101 or EGR 101 |
| SER | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CADD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR 101; MAT 170; Pre or Co-requisite: ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| SER | 105 | Personal Computing Environment | Introduces computing devices and their ethical use for creativity, communication and organizing information; utilizes a range of devices and applications; program-ability for the end-user; approaches for organizing, sharing, securing and communicating information; managing a secure computing environment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| SER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| SER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 200 | Software Engineering I | Overview of the foundations of software engineering, with particular orientation toward software development lifecycle processes (SDLP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 1 | | |
| SER | 215 | Software Enterprise I: Personal Process | Software engineering; personal software processes for individual professionalism; time and defect estimation, yield, and productivity. Software tools. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 200 with C or better |
| SER | 216 | Software Enterprise II: Testing & Quality | Project-centered course covering testing and quality in software engineering; concepts, tools, and methods in testing and quality management; teamwork and communication in software engineering. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 215; Pre- or corequisite(s): CST 230 or SER 222 |
| SER | 221 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| SER | 222 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |
| SER | 232 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Prerequisite(s): CST 100, EGR 101 or SER 101 (or corequisite: CST 100); MAT 117 or higher; Credit is allowed for only CST 150 or SER 232 |
| SER | 234 | Operating Systems and Networks | Fundamentals of operating systems; process management, scheduling, synchronization techniques and file management. Network technology, topologies, protocols, application control; network and operating system security. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200; SER 232 |
| SER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 321 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| SER | 322 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management) |
| SER | 332 | Introduction to Graphics and Game Development | Foundations of graphics as used in modern rendering and basic principles of the game development pipeline. Graphics and math concepts and their application in games, graphics and visualization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 |
| SER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 401 | Computing Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: Senior standing; BS Applied Computer Science or BS Software Engineering major |

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| SER | 402 | Computing Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 401 |
| SER | 421 | Web-Based Applications and Mobile Systems | Distributed Web and mobile applications, their design, architecture and supporting technologies; user-interaction concepts and technologies; design and implementation of software servers for Web and mobile systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 321 |
| SER | 422 | Web Application Programming | Design and implementation of Web application. Languages, frameworks, technologies, tools and methods used to realize Web client and server solutions. Approaches for securing, testing as well as determining the quality and reliability of Web applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 433 (or SER 322); SER 421 |
| SER | 423 | Mobile Systems | Mobile applications, their architecture, design, and supporting technologies; mobile device operating systems and frameworks; synchronizing mobile applications, support for inter-application data-exchange; accessing and manipulating special-purpose device capability such as location, orientation and input modality. Practices for securing mobile runtimes and optimizing run-time performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 421 |
| SER | 431 | Advanced Graphics | Topics in real-time rendering and graphics hardware. Uses graphics processing unit hardware to implement rendering of higher-order surfaces and special effects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 332 |
| SER | 432 | Game Engine Architecture | Functional requirements of a modern game engine architecture. Students work in teams to develop advanced features for a game engine. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 or SER 321 |
| SER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | |
| SER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| SER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 501 | Advanced Data Structures and Algorithms | Advanced algorithms and how they are effectively applied to solve problems. Algorithm design, analysis, classification, optimization, and application. Practice implementing and employing algorithms to solve realistic problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 502 | Emerging Languages and Programming Paradigms | Emerging programming languages, their design, description, implementation, and advanced features; API design, including facilities for creating secure distributed applications, facilities supporting software services, naming and composition; language paradigms and the resulting implications on execution; run-time systems and storage management; approaches to compilation and execution. Requires ability to program in an object-oriented programming language and knowledge of data structures, algorithms, and analysis. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 515 | Software Enterprise: Inception and Elaboration | Project-centric course focusing on the relationship of software processes to entrepreneurship and business processes; requirements specification and requirements analysis; study of the context and evolution of the software enterprise. The first of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Master of Computing Studies or Software Engineering MS student |
| SER | 516 | Software Enterprise: Project and Process Management | Project-centric course focusing on software process, project management, and technical leadership. Study of the context and evolution of software enterprise project management. The second of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 515 |

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| SER | 517 | Software Factory I | First in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Masters of Computing Studies or Software Engineering MS student |
| SER | 518 | Software Factory II | Second in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 517 |
| SER | 520 | Computer Architecture | Basics of computer architecture. RTN, RISC, CISC concepts; computer arithmetic; ALUs; memory systems; I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Schools of Engineering student; CST 364 (CET 364) OR Graduate, Non-Degree, or Post Bacc student |
| SER | 533 | Database-Centric Enterprise Applications Development | Solutions for enterprise software systems based on relational database technology. Persistence solutions in middleware frameworks. O/R, XML, and scalability issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0; CST 433 |
| SER | 540 | Internet-Enabled Embedded Devices | Accessing hardware devices through Internet, including Applets, HTTP, custom byte streams, XML-RPC, SOAP. Building network-based applications that interface hardware. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 with C or better |
| SER | 552 | Digital Systems Design | Digital system design techniques and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CST 452 |
| SER | 554 | Distributed Computing | Topics in distributed systems, including communications, distributed operating systems, fault-tolerance, and performance issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 556 | Distributed Applications for Windows Platforms | Distributed Web-based applications using Windows frameworks such as .NET, Essential components, XML, remoting, Web services, windows services, user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); CST 420 with C or better |
| SER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0 |
| SER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SER | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 100 | Introduction to Exploration | Science and engineering of Earth, solar system, and space exploration. Experimental design, engineering design; teaming; the professions of science and engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher or Pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |
| SES | 106 | Habitable Worlds | Are we alone in the Universe? If so, why? If not, where are our cosmic cousins? Such questions, once the domain of science fiction, are on the verge of being answered with science facts. Astronomers are discovering planets around other stars. Planetary scientists are exploring the worlds in our solar system. Biologists are unlocking the secrets of metabolism and evolution. Geoscientists are determining how the Earth supports life. And as we struggle to build a sustainable future for ourselves, all of us are finding out how technologically advanced civilizations rise and how they might fall. This course surveys these topics. In the process, students master basic concepts from across the major areas of science and learn what makes the Earth a habitable world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | |
| SES | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| SES | 121 | Earth, Solar System, and Universe I | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher or pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SES | 122 | Earth, Solar System, and Universe II | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre/ Co-requisite: SES 121 with C or better if completed |
| SES | 123 | Earth, Solar System, and Universe Laboratory I | Studies astronomical and geological processes through observations and measurements. Requires field trips and evening telescopic observing. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Corequisite(s): SES 121 with C or better if completed |
| SES | 124 | Earth, Solar System, and Universe Laboratory II | Studies astronomical and geological processes and life through observations and measurements. Requires field trips and evening telescopic observing. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): SES 123 with C or better. Pre- or corequisite(s): SES 122 with C or better if completed |
| SES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| SES | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 311 | Essentials of Astrobiology: Exploration for Life in the Universe | Origin and evolution of life on Earth. Strategies to explore for life in the cosmos. Possible field trips to explore regional geological analogues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): BIO 181 (188), CHM 113 or PHY 121; MAT 265 or 270 |
| SES | 330 | Practical Electronics and Instrumentation | Applied principles of electronics and mechanical design as used by the modern instrument builder, using a systematic approach to the design process: Identify a scientific problem, develop specifications necessary to solve the problem, develop a prototype solution, test solution for plausibility, break down problem into components, design and build the solution then test in a relevant environment. Builds on introduction to circuits and engineering concepts from prerequisite courses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | | Pre-requisites: PHY 131 and 132 with C or better |
| SES | 350 | Engineering Systems and Experimental Problem Solving | Introduces integration of scientific and engineering computational methods into scientific research and successful exploration. Provides an active, project-based environment for learning science and engineering by means of a common set of computational tools. Also provides a detailed overview of procedural and object-oriented programming with an emphasis on problem solving. Students solve problems by developing software in an interpreted language (Python). Problems may include visualizing data, interfacing with hardware, or solving numeric problems. Covers procedural programming concepts including data types, variables, control structures, arrays, and data I/O. Covers object-oriented programming concepts including object creation and use, object interaction, and the design of simple classes. Covers software engineering concepts including testing, incremental development, understanding requirements, and teamwork. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): MAT 267, 272 or 275; PHY 131 and 132 (or 151) with a grade of C or better |
| SES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 405 | Exploration Systems Engineering | Provides an introduction to systems engineering with an emphasis on the following topics: the systems engineering process, requirements, design fundamentals, subsystem fundamentals, trade studies, integration, technical reviews, case studies and ethics. Prepares the student for the capstone spacecraft/mission design course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): SES 330 and SES 350 with C or better |
| SES | 410 | Senior Exploration Project I | Design and development of an Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; Senior standing |
| SES | 411 | Senior Exploration Project II | Continuation of SES 410. Development of Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; SES 410 |
| SES | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| SES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SES | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SES | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Prerequisite(s): minimum 45 hours |
| SES | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| SES | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SET | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| SET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SGS | 101 | Thinking Globally: The Individual and Authority | Examines the changing notions of the individual and authority over history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| SGS | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| SGS | 111 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| SGS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| SGS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 202 | Technology and Nature in World Settings | Examines changing interactions among humans and nature, geographic systems, global demography, and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | |
| SGS | 203 | Contemporary Global Trends | Gives a grounding in patterns of international politics and global social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| SGS | 204 | Professional Global Career Development | Orients the student to working in global contexts and to thinking critically about careers in the global arena. Focuses on working in organizational settings distinctly global. Three modules: nation-state, corporations, and working international organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Pre-requisites: Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| SGS | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| SGS | 294 | Special Topics | | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 301 | Principles of Global Studies | Presents current debates about globalization and subjects these to critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SGS | 303 | Global Trends | Analyzes the process of globalization across boundaries through the investigation of the determinants and ramifications of globalization from the vantage of modern social sciences. Students are expected to conduct and articulate independent critical analyses toward a more in-depth understanding of this social phenomena, global history, and particularly the global economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisites: Minimum 30 hours; ENG 102 with C or better |
| SGS | 305 | Research Methods | Broad introduction to social science research methodology and design, particularly the methods used to analyze global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L | Pre-requisite: SGS 101 (or 301) with C or better; Credit is allowed for only POS 301 or SGS 305 |
| SGS | 310 | Global Urban Systems | Comparative approach focuses on relationship between development of comparative urban systems and environmental impacts at local, regional, global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites:SGS 101 or 301 with C or better |
| SGS | 311 | Urbanization in China | Explores contemporary and future Chinese urbanization from economic, built form, and environmental perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |

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| SGS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SGS | 320 | Mechanisms of Governance | One of the fundamental issues in the social sciences concerns the problematic attainment of social order, which is the principal aim of governance. Presents the five principal mechanisms purported to account for social order, and illustrates these by providing empirical examples of each; includes film clips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |
| SGS | 321 | International Institutions and Global Governance | Provides an in-depth examination as to how the international community organizes itself, through international institutions, to deal with serious international issues, and how the institutions of international governance can be improved. Studies diverse examples of international institutions primarily from the perspective of international relations (IR) theory and the role of international law (L). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 321 or 394 (International Institutions) |
| SGS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 325 or SGS 325 |
| SGS | 330 | Globalization and the Environment: Problems and Solutions | Assesses the impact of globalization on the earth's environment. Examines such issues as biodiversity loss to pollution to urbanization to climate change, among others, and assess how globalization has driven, impacted or improved these environmental problems. Emphasis on understanding the social, political and economic factors that have contributed to global environmental change and the degree to which globalization processes are something 'new', as well as on examining the ability of communities, nations and transnational institutions to manage these global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; 30 completed hours |
| SGS | 340 | Violence, Conflict and Human Rights | Interdisciplinary examination of the evolution and role of human rights in global society. Major themes include the political struggles over enforcement of human rights and curtailment of violence against individuals. Pays close attention to the role of non-governmental organizations and diplomacy in advancing human rights norms and also examines America's role in human rights, both at home and abroad. Focuses on the causes and effects of violence and human rights abuses in the context of torture, the "war on terror," and crimes against humanity. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108; SGS 101 (or 301); 30 minimum hours; Credit is allowed for only SGS 340 or 394 (Violence/Conflict/Human Right) |
| SGS | 341 | Humanitarian Crisis and International Intervention | Focuses on political, legal, and ethical issues raised by decision about military interventions in genocide and humanitarian crisis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 343 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only SGS 343 or REL 379 |
| SGS | 344 | Facing the Past: Truth, Memory, Denial After Atrocities | The past has never been so present as it is today. Over the last two decades, the world has shown an increasing interest in uncovering the hidden and forgotten histories of state-sponsored atrocities and acknowledging the fate of victims and survivors. Studies this movement for the recovery of truth, memory, and moral responsibility includes a wide range of actors and takes a number of different forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 350 | Economic Development and Globalization | Major issues and models in economic development. Studies development policy and foreign aid practiced since the 1970s and recent critique of these practices. Analyzes the mistakes made in the last 40 years, and potential for improving the practice of foreign aid. Contemporary issues in development economics, including the impacts of bad governance, foreign aid, corruption, war, military intervention and democracy on economic growth with emphasis on policy evaluations in health, education, microfinance and monitoring corruption. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 350 or 394 (Prin of Econ Dev Global) |
| SGS | 360 | Cultural Aspects of Globalization | Cultural aspects of globalization, starting with a theoretical discussion of what culture is and then weaving this discussion into an empirical examination of UNESCO's World Heritage program as a practical means of studying the role of culture in globalization. A number of questions guide our inquiry: What is culture? What forms does it take? Can culture be preserved? If so, what are the consequences? How is the UNESCO World Heritage Program structured? How does it conceive culture? What is its understanding of the global and the role of the local in it? | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; SGS 101 or 301; Minimum 30 hours; Credit is allowed for only SGS 360 or 394 (Cultural Aspects of Globalization) |

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| SGS | 366 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| SGS | 381 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |
| SGS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 441 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| SGS | 442 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| SGS | 454 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| SGS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| SGS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| SGS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SGS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| SGS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | | |
| SGS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| SGS | 501 | Global Theory | Examines theoretical and analytical frameworks employed by institutions to frame action related to increased global uncertainty including economic, sociological, psychological, decision theory, gaming and institutional behavior frameworks. Uses case studies in key global issue areas such as climate change/natural hazards, energy security, urbanization, food security, security, failed states | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SGS | 502 | Global Institutions and Actors | Examines key types of global institutions, (1) multinational businesses, e.g., Toyota, (2) international development organizations, e.g., the World Bank, and (3) voluntary organizations, e.g., the Red Cross/Crescent, in terms of the roles that they play in shaping localized outcomes. Using case studies, explores the impact of international actors in terms of the power and influence that they exert through international treaties, standards, information diffusion, influence on local governments and other organizations, dissemination of international "best practice." | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SGS | 503 | Methods: Global Decision Making Under Uncertainty | Examines and critically assesses approaches and methods used in decision making and planning under uncertainty in global contexts, e.g., scenarios, SWOT, risk analysis, contingency planning, gaming, economic forecasting, anticipation-foresight techniques, decision making under complex conditions, and rapid assessment techniques. Explores the strengths and weaknesses of different approaches under varying conditions, synergies achievable through application of multiple methodologies, and normative assumptions underlying various methodologies. Students gain "hands-on" experience in the use of a variety of techniques through assignments based on real-world situations. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 504; SGS 505 |

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| SGS | 504 | The Individual As Decision Maker in Cross-Cultural Global Contexts | Focuses on the role of the Individual decision maker in cross-cultural contexts, acting in the context of globally engaged institutions. The individual is virtually always embedded in an institutional environment whether as manager, planner, advocate, frequently acting as part of a team. It is recognized that the various agents/stakeholders involved in addressing an issue, negotiating a deal, in a global context, almost invariably hold significantly different worldviews, cultural norms and decision-making styles. Deals with the individual decision maker in both public and private decision-making milieus. Discusses modes of intervention and initiative. Addresses issues of leadership, reconciliation of different decision-making modes, and acting effectively in cross-cultural environments. Emphasizes decision making under high uncertainty, using case studies, e.g., pending nationalizations or privatization. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 503; SGS 505 |
| SGS | 505 | Preparation for the Global Field Project | Prepares students for the global field project. In addition to scheduled classes, each student meets with her/his advisor at regular intervals during the semester to prepare for the Global Field Project. During the semester, students prepare a work plan for their Global Field Project, including objectives of the exercise, specifications of deliverables. Network building is an important secondary objective, and development of an esprit de corps among Global Studies masters students. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 503; SGS 504 |
| SHS | 101 | American Sign Language I | Basic receptive/expressive conversational skills; basic grammar and syntax rules. Orientation to deafness and deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | |
| SHS | 102 | American Sign Language II | Further development of receptive/expressive conversation skills in ASL; finger spelling. Continued exploration of deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 101 with C or better; taken within the past two years |
| SHS | 105 | Introduction to Human Communication Disorders | Introduces hearing, language, and speech problems in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | Prerequisite(s): Freshmen; maximum 25 earned hours |
| SHS | 201 | American Sign Language III | Continued development of fluency in ASL with emphasis on more abstract concepts and the ability to narrate events. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 102 with C or better and taken within the past two years |
| SHS | 202 | American Sign Language IV | Further development of fluency in ASL with emphasis on literature, folklore, and signing narratives with multiple characters. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 201 with C or better and taken within the past two years |
| SHS | 250 | Introduction to Phonetics | Introduces English phonetics with emphasis on phonetic transcription, articulation, phonology, and disorders of speech. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 310 | Anatomical and Physiological Bases of Speech | Noncadaveric study of anatomical systems that underlie human speech and language, including respiration, phonation, articulation, and related nervous system processes. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY 101 |
| SHS | 311 | Hearing Science | Studies the physical characteristics of sound and of the structure and function of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY101; SHS 105 |
| SHS | 350 | Brain Memory and Language | Covers memory and language and their associated brain areas, and the resulting behavioral consequences of injury and disease. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 367 | Language Science | Normative aspects and integration of language structure, comprehension, and production in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | |
| SHS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 375 | Speech Science | Normative aspects of speech, hearing, and language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310; SHS 311 |
| SHS | 376 | Psychoacoustics | Introduces acoustics, cochlear anatomy and physiology, and the perception of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 401 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311; Credit is allowed for only SHS 401 or 501 |
| SHS | 402 | Clinical Methods and Treatment of Communication Disorders | Principles and techniques for planning speech and language intervention, including observation experiences. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 250, 465 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SHS | 461 | Accent Modification | Increases speech intelligibility in non-native English speakers by changing their English pronunciation skills. International students learn the pronunciation of American English vowels and consonants, intonation and stress patterns, and rhythm of speech. Conducts pre- and post-assessments of the students' intelligibility to determine the need for improvement on specific sounds and speech patterns. | Y | LEC | Y | YGB | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): minimum 45 hours |
| SHS | 465 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | Credit is allowed for only SSH 465 or 565 |
| SHS | 470 | Developmental Speech and Language Disorders | Introduces the nature of speech and language disorders in children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 465 |
| SHS | 473 | Implementation of Treatment Plans for Individuals with Communication Disorders | Students will learn to follow written treatment plans, individual education programs, individual support plans or protocols developed by the supervising speech-language pathologist. Opportunities to learn methods for eliciting therapy targets and to apply critical thinking and problem solving during therapy will be provided. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 483 | Professional Issues and Ethical Considerations for the SLPA | Studies licensure laws, professional conduct, and ethical practice in the field of speech language pathology. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 485 | Acquired Speech and Language Disorders | Introduces acquired speech and language disorders across the lifespan. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310 |
| SHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 496 | Aural Rehabilitation | Approaches to aural rehabilitation of children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311, 375 and 401; Credit is allowed for only SHS 496 or 596 |
| SHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-7 | | |
| SHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | |
| SHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | Prerequisite: MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 501 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311 with C or better; Credit is allowed for only SHS 401 or 501 |
| SHS | 502 | Basic Audiometry | Covers the bases, purposes, rationales, and procedures for the core clinical tests of auditory function in adults and children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 504 | Amplification I | Operation, electroacoustic measurement, selection, and prescriptive fitting of amplification devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 505 | Survival Sign Language | Facilitates effective manual and alternative methods of communication with deaf individuals in clinical settings. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 508 | Pediatric Audiology | Emphasizes the principles and procedures for early identification and management of congenital and early-onset hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 510 | Amplification II | Verification and validation of hearing aid performance, benefit, and satisfaction. Fitting considerations for pediatric and geriatric populations. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 511 | Auditory Perception by the Hearing Impaired | Psychophysical methods and behavioral aspects of hearing, with an emphasis on the perceptual consequences of sensorineural hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 512 | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 512 | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 513 | Neurophysiology of the Auditory System | Focuses on the neurophysiology of the normal auditory system and on changes associated with hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 515 | Instrumentation and Calibration | Electronic instruments used to produce, modify, and measure characteristics of sound. Measurement standards and methods for calibration of audiologic equipment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |

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| SHS | 516 | Auditory Evoked Potentials | Electrophysiologic assessment of the peripheral and central auditory nervous system. Lecture, lab. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 517 | Balance Assessment | Clinical analysis and treatment of balance disorders and dizziness. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 518 | Auditory Rehabilitation | Study and clinical application of assistive technology and rehabilitative services for managing the effects of hearing impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 519 | Auditory Pathologies and Disorders | Familiarizes students with major diseases, pathologies, and disorders of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 520 | Auditory Pathologies/Disorders and Otoneurologic Applications | Familiarizes students with major pathologies and disorders of the human auditory system. Examines advanced otologic, neurologic, and audiologic approaches in the differential diagnosis and treatment of peripheral and central disorders of the auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 521 | Auditory Aging | Focuses on aging and related effects on the auditory system and audition. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 522 | Hearing Conservation/Instrumentation | Examines the prevention, identification, physiologic effects, and management of hearing loss due to noise exposure. Incorporates measurement standards and methods for calibration of electronic audiologic instruments used to produce, modify, and measure characteristics of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 523 | Advanced Audiometry | Discusses assessment and intervention procedures beyond the basic audiologic test battery and for special populations. Examines relevant new audiologic tests and procedures. Prerequisites: SHS 502, 513; SHS major. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS major; SHS 502 and SHS 513 |
| SHS | 524 | Counseling in Communication Disorders | Theories of counseling emphasizing the psychological and emotional impact and management of individuals with communication disorders and their families. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 525 | Audiology Practice Management | Business practice issues, quality assurance, and professional ethics for the practicing audiologist. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 526 | Launch to Clinical Methods in Audiology | In Launch-to-Clinic, students rotate through on-campus observations and group orientation to the ASU Speech and Hearing Clinic. Students learn the policies and procedures of the ASU Speech and Hearing Clinic, software specific to the clinic operations, report writing, and clinical documentation with practice to develop the skills needed to succeed in subsequent clinical rotations both on and off campus. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): Audiology major. Credit is allowed for only SHS 580 (Audio Clinical Observation), and (Audiology Observation) |
| SHS | 530 | Development, Assessment, Intervention: Conception through 3 years | Covers development of children from conception to 3 years of age with a focus in early intervention. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 538 | Clinical Methods in Speech-Language Pathology | Provides the knowledge and skills in clinical methods for treatment and diagnosis in speech-language pathology. Topics cover essential information to participate in screening and prevention opportunities, to structure and implement therapy goals and strategies, to apply for internships, and to administer and interpret informal and formal diagnostic tests. | Y | LEL | Y | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. |
| SHS | 539 | Professional Issues in Speech-Language Pathology | Covers professional issues in speech-language pathology to ensure that students meet the professional knowledge requirements set forth in the American Speech-Language-Hearing Association (ASHA) certification standards. The topics cover essential information that the student needs to have in order to meet graduation requirements, comply with ASHA's ethical requirements, complete ASHA certification requirements, comply with Arizona state licensure requirements, prepare for a Clinical Fellowship Year and be involved in education and advocacy for the profession of Speech-Language Pathology. | N | LAB | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. Credit is allowed for only SHS 539 or SHS 580 (SLP Professional Issues) |
| SHS | 540 | Development, Assessment, Intervention: Preschool | Covers development, assessment and intervention of children from 3 years to 6 years of age, with a focus on preschool education. It includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 530 |
| SHS | 550 | Development, Assessment, Intervention: School-Age Children | Covers development, assessment and intervention of children from 6 years to 21 years of age, with a focus on school education. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language, reading, writing and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 540 |
| SHS | 552 | Physiological Measures of Auditory Function | Focuses on the measurement of otoacoustic emissions and acoustic immittance. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 555 | Cochlear Implants | Covers the research and clinical aspects of cochlear implantation with a focus on the principles of speech coding strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |

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| SHS | 560 | Development, Aging, Assessment, Intervention in Adults | Covers development, aging, assessment and intervention in adults with a focus on the elderly and the contexts for their service delivery. Includes changes in the adults related to anatomy, neurophysiology, cognitive, motor, perceptual, speech, language, literacy and hearing aspects. Also addresses service delivery models in different contexts where elderly and young adults with acquired disabilities are served. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 550 |
| SHS | 565 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Credit is allowed for only SHS 465 or SHS 565 |
| SHS | 567 | Neural Bases of Communication Disorders | Neuroscience and its application to matters of normal and disordered communication. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 570 | Communication Disorders and Multicultural Populations | Studies racial and ethnic biases and the communication behaviors and disorders in various cultural groups. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 571 | Augmentative Communication and Language Programming | Focuses on individuals across the age span who are unable or who are at risk for being unable to communicate with spoken language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 572 | Language Assessment and Intervention in Infants and Toddlers | Focuses on the birth to 3-year-old population who are at risk for or who have communication and language disabilities. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 573 | Language Assessment and Intervention with School-Age Populations | Focuses on later language development, linguistic demands of academic settings, assessment and intervention strategies for older children and adolescents. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 574 | Management of Voice and Swallowing Disorders | Focuses on assessment and intervention of people with voice, swallowing, and craniofacial disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 575 | Aphasia and Related Neurogenic Language Disorders | Assessment and treatment of acquired neurolinguistic impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 576 | Neuromotor Speech Disorders | Evaluation and treatment of the dysarthrias and apraxia of speech. Emphasizes acquired adult disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 577 | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 577 | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 579 | Feeding and Swallowing Disorders Across the Lifespan | Focuses on individuals across the age span who have feeding and/or swallowing disorders. Presents assessment and treatment strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 580 | Clinical Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 581 | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 581 | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 582 | Differential Diagnosis of Communication Disorders | Procedures for assessing speech/language disorders in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 584 | Clinical Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 585 | Articulation and Phonology: Assessment and Intervention | Assessment and treatment of developmental articulation and phonological disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 587 | Language Assessment and Intervention with Preschool Populations | Focuses on preschool language disorders and assessment and intervention strategies for preschool children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | SEM | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SHS 588 or APL 588 |
| SHS | 589 | Audiology Grand Rounds | Grand Rounds bridges clinical and academic knowledge through case studies, application of emerging research, and clinical workshops. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |

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| SHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 596 | Aural Rehabilitation | Approaches to aural rehabilitation in children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Credit is allowed for only SHS 496 or 596 |
| SHS | 597 | Bilingual Speech-Language Pathology | Reviews speech and language assessment and intervention practices with bilingual populations from infants to adults. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SHS | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SLB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 510 | Amateur Sports Law | Studies law, policy and problem solving in the amateur sports context, focusing primarily on interscholastic and intercollegiate athletics. Title IX and racial equality in sports. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 510 or LAW 791 (Amateur Sports Law) |
| SLB | 511 | Strategic Career Planning | Focuses on examining job opportunities in the sports industry and the development of strategies for obtaining a position suitable to the talents and abilities of individual students. Students refine their skills in terms of searching for a job. Students also develop a career plan, beginning with an entry-level position for those who have worked in the industry or a next-level position for students currently working in the area. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-2 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 511 or LAW 598 (Strategic Career Planning) |
| SLB | 512 | Professional Sports Law | Studies law, revenue, branding and problem solving in the professional sports context, focusing primarily on professional sports league governance and regulation, labor relations, representing and marketing players and coaches, and issues of equity and race. Also examines international issues related to professional sports. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 512 or LAW 691 (Professional Sports Law) |
| SLB | 513 | Sports Law and Business | Studies law, policy and problem solving in the context of the sports industry at all levels. Exposes professional, amateur and international sports law issues, examining those issues in a problem-focused manner. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student |
| SLB | 514 | Contracts: Negotiation and Drafting in the Sports Industry | Provides a working or basic knowledge of contract law, with in-depth instruction with regard to negotiating and drafting in the sports context. As their final project, students select a player, coach, university or club and then negotiate a contract. Negotiation sessions are held during class sessions and students evaluate each other, as well as receiving evaluation from the professor. Replicates the negotiation process in the sports industry. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 514 or LAW 598 (Contracts in the Sports Industry) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLB | 515 | Sports Business Strategy and Industry Dynamics | Sports can involve a jog around campus or big business. Sports are interesting, important and a vivid context to learn about consumers, organizations, diverse stakeholders, media and entertainment, partnerships and sponsorship, highly competitive strategies in finance and marketing, managing community venues, big events, and other relevant business topics. Maintains a pragmatic, experiential, yet well-grounded focus, studying the role, nature and dynamics of sports business both in and around "sports industries" and in and around "conventional businesses." Builds and "tests" knowledge and exercise skills related to sports business analysis, decision making, communication and both strategy development and execution. Intellectually rigorous, yet fun. Develops a sophisticated, yet practical understanding of the nature, contexts and dynamics of sports business. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 515 or MKT 591 (Sports Business Strategy and Industry Dynamics) |
| SLB | 516 | Sports Business Development | Develops an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and of their constantly changing and interactive impact on sports business practice and performance. Gives broad exposure to the major revenue generating domains in the sports industry. Explores the fundamentals of marketing and applies those fundamentals to the domains of sponsorship, endorsement, media, ticketing, merchandising and fundraising as means to create and maintain revenue streams. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 516 or MKT 591 (Sports Business Development) |
| SLB | 517 | Marketing for Sports Organizations | Studies the role, nature and dynamics of sports business and builds knowledge and skills related to sports marketing analysis, decision making and strategy development and execution. Intellectually challenging and demanding, yet fun. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 517 or MKT 598 (Sports Marketing) |
| SLB | 518 | Sports Analytics | Develops and applies analytical skills that are useful in nearly every career. Although the course focuses on applications in the sports context and uses approaches that are rapidly becoming important in the business of sports analytics, this is not a survey course about issues in sports. Instead, this class is about curiosity, storytelling and logic. An understanding and interest in both sports and numbers make this class good. General curiosity makes it great. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 518 or MKT 591 (Sports Analytics) |
| SLB | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic or writing a literature review of a topic. | Y | REC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLB | 591 | Seminar | A small class emphasizing discussion, presentations by students and written research papers. | Y | SEM | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLB | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| SLB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLC | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ENG 101, 105, or 107; credit is allowed for only CHI 120 or SLC 120 |
| SLC | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |
| SLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: maximum 25 hours |
| SLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLC | 201 | Introduction to Linguistics | Examines the nature and diversity of world languages, linguistic structures and functions of language, language variation, pragmatics, and language acquisition. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU or SB | |
| SLC | 202 | Introduction to Literary and Cultural Theory | Interdisciplinary approaches to understanding culture and cultural production (literature and critical theory, film, visual art, and performance, among others) in different cultures and regions. Classes are taught by a primary instructor aided by several guest lecturers in their area of academic specialization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 102, 105, or 108 with C or better |
| SLC | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| SLC | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver Age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| SLC | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| SLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| SLC | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskia, and other writers. Taught in English. An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskia, and other writers. Taught in English. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, or 108; Credit for RUS 323 or SLC 323 |
| SLC | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| SLC | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| SLC | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| SLC | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only HEB 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| SLC | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better. Credit is allowed for only HEB 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| SLC | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| SLC | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| SLC | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| SLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 401 | Translation Theory and Practice | Translation theories and professional practices and ethics; bibliography, computer technology, and sample texts for natural and social sciences and humanities. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

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| SLC | 420 | Foreign Literature in Translation | Not for language majors (except in Asian languages and Russian); open to language majors as a related-area course. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| SLC | 421 | Japanese Literature in Translation | Readings selected by theme or genre or period from various works of Japanese literature in English translation. May be repeated when topics vary. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | |
| SLC | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| SLC | 440 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |
| SLC | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| SLC | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| SLC | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| SLC | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| SLC | 447 | German Modernism | Examines examples of modernism in literature, art and film from German-speaking Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only GER 447 or SLC 447 or GER 494 (German Modernism) |
| SLC | 450 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| SLC | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| SLC | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| SLC | 479 | Introduction to Teaching Foreign Languages | Introduces teaching methodologies, language learning, and current best practice in teaching foreign languages in U.S. middle and high schools. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 480 | Methods of Teaching Foreign Languages | Teaching foreign languages and literatures at secondary and college levels. Does not meet the Liberal Arts and Sciences General Studies requirement for humanities and fine arts. Required for admission to SED 478. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 479 with C or better |
| SLC | 481 | Technical and Scientific Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as engineering, architecture, agriculture, computer technology, electronics, and physical and biological sciences. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 482 | Business and Financial Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as economics, finance, insurance, management, marketing, accounting, advertising, and real estate. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 483 | Medical and Legal Translation | Resources and strategies for translation of professional texts in subjects such as medicine, nursing, public health, criminal justice, and international law. | N | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 491 | Crossing Languages and Cultures | Interdisciplinary and cross-cultural study in two or more world languages or cultures. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SLC 201 and 202 with C or better |
| SLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| SLC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | Pre-requisite: minimum 56 hours |
| SLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLC | 515 | Second-Language Acquisition | Discusses and applies theories of second-language acquisition. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 400 |
| SLC | 551 | Global Approaches to Translation | Familiarize students with various approaches to translation practice. Examines issues related to the cultural role of translation. Students prepare a translation, justification of translation choices, and discussion of the complexities posed by the translation. Readings address a broad array of translation theories, with most focused on translation as a globally theorized phenomenon in the 20th and 21st centuries. Readings and discussions focus on how one translates, and on translation as a culture-making enterprise inextricably tied to the questions of who translates, in what context, for whom, and to what ends. Students understand translation theories from different eras and cultures; understand how translation is implicated in different forms of intercultural contact (colonialism, commerce, proselytization); gain experience translating texts from a source language into English; and can explain why they translated the way they did. | N | RSC | N | GNA | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SLC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 602 | Literary and Cultural Theory | Trains SILC Ph.D. students in understanding the central role of languages and literatures in the composition of culture. Employs a range of interdisciplinary approaches to various forms of cultural production, specifically as they relate to language, literature, film, visual art, and performance. Through exploration of primary works and foundational theoretical texts, shows students how to question the motivations, aesthetics, transmission, reception, and social control of a variety of works and media. At the center of this analysis stand the critical debates about the nature and definition of the term culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 304 | Computational Linguistics of Slavic Languages | Information technology and Slavic languages, including Web design, digitalized resources, information retrieval, math/statistical analysis, and PERL. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | CS | |
| SLV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 440 | History of Slavic Languages | Comparative evolution of East Slavic, West Slavic, and South Slavic languages from the earliest record to the standardizing of national languages in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB | |
| SLV | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLV | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLV | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| SLV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLV | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SMC | 520 | Methods and Tools in Applied Cognitive Science | Provides a hands-on approach to understanding and using advanced methodologies commonly implemented in the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 521 | Methods and Tools in Simulation and Modeling | Introduces specific methods and tools used in the field of modeling and simulation, with computer-based experience through both writing and using simulation software. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 540 | Foundations of Applied Cognitive Science | Provides a critical background in the theory and organization of the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 541 | Foundations of Simulation and Modeling | Introduces a wide variety of methodologies utilized by and applications of the broad field of simulation and modeling. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | |
| SMC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | |
| SMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SMC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 332 | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 390 | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | 420 | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| SOC | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshmen; maximum 25 earned hours |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 220 | Sport and Society | Examines sports in American society as a source of socialization and an institution where gender, race/ethnicity, and class interact. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| SOC | 270 | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | |
| SOC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 301 | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 321 | Sociology of Work | Social and cultural analysis of industry. Occupational roles, status, and social participation of workers. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | 331 | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | 333 | Population | Global trends in population growth, composition, and distribution; theories, policies, and impact of population trends on environmental quality and development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 334 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| SOC | 340 | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G & H | |
| SOC | 360 | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | 363 | Men and Masculinity | Sociological analysis of how masculine identity is defined, negotiated, and variously constructed depending upon class, ethnicity, age, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 or 102, SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB, SOC, SOS, or SSH 370 |
| SOC | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB or SOC 371 |
| SOC | 375 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| SOC | 378 | Migration and Society | Application of social scientific theories and principles in order to understand the social and ethnic consequences of international migration with a focus on the United States. Students will communicate views formulated from empirical evidence and reasoned analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Pre-requisites: ASB 102 or SOC 101 with C or better; 45 minimum hours; Credit is allowed for only ASB 378 or SOC 378 or TCL 378 |
| SOC | 390 | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | CS | Pre-requisite: MAT 142 or higher |
| SOC | 391 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Prerequisite(s): SOC 101 or SOC 301 or CDE 232; SOC 390; Credit is allowed for only FAS 361 or SOC 391 |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 415 | The Family | Family considered from the institutional viewpoint; in-depth look at its historical development and its adaptation to a changing culture; analysis of the family system in many cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |

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| SOC | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | 420 | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | |
| SOC | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 424 | Women and Health | Women as healthcare workers and an in-depth analysis of issues of health, illness, and healthcare for women | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 426 | Social Inequality | Examines stability and change in social inequality based on class, race and gender, and in the context of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 427 | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 433 | Applied Demography | Science of population analysis. Covers techniques for measuring fertility, mortality, migration, and population composition. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; FAS 101, 331, PSY 101(PGS 101) or SOC 101 with C or better; Credit is allowed for only FAS 435 or SOC 435 |
| SOC | 448 | Epidemics and Society | How epidemics occur; how they are perceived in society; how epidemics affect society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 451 | Comparative Sociology | Cross-cultural study of basic social institutions; the methodology of cross-cultural research. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| SOC | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| SOC | 483 | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 486 | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| SOC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| SOC | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 505; Graduate students only (degree and non-degree) |
| SOC | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 507; Graduate students only (degree and non-degree) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOC | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling. Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. Projects involve conducting analyses and writing results. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 508; Graduate students only (degree and non-degree) |
| SOC | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites:Credit is allowed for only FAS or SOC 509; Graduate students only (degree or non-degree) |
| SOC | 512 | Secondary Data Analysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 512; Graduate students only (degree or non -degree) |
| SOC | 515 | Studies of the Family | Current developments in the study of marriage and the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 516 | Family Demography | Current developments in the study of family demography. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 523 | Social Stratification | Overviews significant themes, issues, and bodies of work in the field of social stratification, a fundamental topic of sociological inquiry. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 533 | Demographic Methods | Emphasizes methods and techniques in demographic analyses such as life tables. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 585 | Sociological Theory | Analyzes major sociological theories, from classical to contemporary. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only FAS 586 or SOC 586 |
| SOC | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |
| SOC | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 587 or SOC 587. Credit is allowed for only FAS 588 or SOC 588 |
| SOC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 603 | Perspectives in Sociological Inquiry | Provides an overview of core theoretical frameworks and associated analytic approaches in sociology. Taught by faculty members from across the university with sociological training or research interests, providing students with foundational and advanced research tools as well as introducing them to ongoing research at ASU, the distinctive contributions of sociological perspectives to inter- and transdisciplinary projects, and potential opportunities for research residency. | N | SEM | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 685 | Applied Social Theory | Overviews main classical and contemporary theoretical paradigms and concepts in sociology and provides advanced training on using them to build empirical analytic models. Students identify theoretical perspectives appropriate for research questions, build corresponding conceptual frameworks, and formulates testable hypotheses. Seminar format and therefore students' active participation is expected. | N | SEM | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |

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| SOC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 210 | Sociology of Murder | Sociological perspectives on various forms of murder and types of murderers. Also considers forms of punishment for murder. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only FOR 210 or SOC 210 |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better. Credit is allowed for only FAS 264 or SOC 264 |
| SOC | 270 | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| SOC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 301 | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | 328 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |
| SOC | 331 | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | 332 | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 334 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| SOC | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SOC | 340 | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| SOC | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: 45 earned credit hours; Students who have credit for ASB 353, may not enroll in SOC 353 |

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| SOC | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. May be repeated once for credit. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 360 | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | 364 | Popular Culture | Studies the social approaches to popular culture, focusing on the function of various forms (literature, film, theatre, and music). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 366 | Film and Society | Studies the social approaches to film as an art form, mass medium, and ideological construct. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SOC | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB or SOC 371 |
| SOC | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| SOC | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. May be repeated for credit when topics vary. Fieldwork practicum. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 400 | Perspectives on Aging | Broad overview of gerontological issues; e.g., physical aging, retirement, living options, caregiving, theoretical background, death. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | 419 | Organizations and Technological Change | Explores the increasing impact of information technology on corporate, governmental, and private organizations. May involve fieldwork. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| SOC | 426 | Social Inequality | Examines stability and change in social inequality based on class, race and gender, and in the context of globalization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 427 | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 443 | Sociology of Corporations | Examines corporations as social institutions and the implications of their status as a legal person on politics, culture, and economy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 445 | Globalization, Development, and Resistance | Explores the interconnections among globalization, development, and grassroots movements for social change in Africa, Asia, and Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 456 | Political Sociology | Social factors associated with voting; nature and structure of the electorate and political parties and the nature of national and international power structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SOC | 457 | Global Social Movements | Examines how groups mobilize across borders to pursue social goals, including equality, justice, peace, and salvation in a global context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 483 | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 486 | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |

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| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SOC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 100 | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 110 | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 100 | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | 101 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | MA | Pre-requisites: MAT 117 with C or better or MAT 194: EFM (with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| SOS | 110 | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 117 | Food System Sustainability | Food systems are particularly important for human societies to sustain and are also particularly vulnerable to multiple threats related to the interconnected sustainability challenges we face. Introduces the concepts and issues involved in food systems sustainability. Divided into four modules, the first three of which address the other systems with which food systems interact--socio-ecological, socio-cultural and socio-technical systems. The final module addresses the future of food systems. Teaches students about the main issues in food system sustainability and allows students to enhance their critical thinking skills by applying them to the many sustainability challenges associated food system activities via solutions-based learning including the social, ecological, economic and institutional dimensions. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |
| SOS | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | HU | Credit is allowed for only SOS, FSE or CEE 181 |
| SOS | 182 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| SOS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | GRD | School of Sustainability | School of Sustainability | 1-3 | | |
| SOS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | |
| SOS | 201 | Introduction to ASU and Sustainability | Introduces all ASU transfer students to the unique elements, culture, challenges and opportunities of the university. | N | LEC | N | YGB | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: Sustainability major; Minimum 24 hours |
| SOS | 210 | Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| SOS | 211 | Calculus and Probability for the Life and Social Sciences | Introduces two of the most important and useful mathematical frameworks used to study natural and social phenomena: probability and calculus. Probability is used to describe an attitude of mind toward some proposition whose truth is not certain. Calculus is the branch of mathematics used to study the behavior and dynamics of functions: calculus is the mathematical study of change. Students gain the basic competence needed for applying probability and calculus when thinking about and research problems in sustainability. Focuses on and discusses applications, the meaning of important concepts, the origins of the rules of derivation and integration, and logic behind why the methods work. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | MA | Pre-requisite: AML 100 or SOS 101 with B or better |
| SOS | 220 | Systems Thinking | Introduces systems thinking and complexity science, with an emphasis on analytical relevance for thinking about a myriad of issues involved in sustainability. Hones students' abilities to read critically, articulate their views clearly, and think about the many systems that shape their lives. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 230 | Professional skills in Sustainability | Builds interpersonal competence, which is a key competence in sustainability. Students work on a small hands-on sustainability project in order to practice professional skills in four domains: teamwork, project management, self-directed and continuous learning, and stakeholder engagement. Students learn how to effectively collaborate in teams, use project management tools to achieve quality products in time, innovate their ways of learning, and create productive dialogue with stakeholders. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 231 | Careers in Sustainability | Aids in career exploration and development for School of Sustainability majors. Explores values, motivations and career options. Students learn how to approach the job search and how to communicate sustainability to employers; also how to prepare a quality résumé, cover letter, and gain a better understanding of the benefits of networking. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: BA or BS Sustainability major; Minimum 45 hours; PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 272 | Environmental Justice | Surveys key environmental justice issues and movements. Uses interdisciplinary social science perspectives to review and analyze U.S. and international case studies. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | SB | Credit is allowed for only ASB 272 or SOS 272 |

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| SOS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 101 or AML 100 with C or better |
| SOS | 300 | Advanced Concepts and Integrated Approaches in Sustainability | Integrates disciplinary contributions to sustainability, teaches advanced concepts in sustainability, and explores methods for identifying sustainability challenges and generating solutions. Focuses on diversity of sustainability research, and integrates specialized approaches in sustainability. Advanced concepts in sustainability, including systems-thinking, complexity, nonlinearity, cascading effects, coupled natural-human systems, governance, future thinking, unintended consequences, normative concerns, transformation, power, participation, and equity. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sust minor with SOS 100 (or 110 or SOS 111/PUP 190) with C or better; 6 hrs from two Sust themes OR Civil and Environ Engineering major with a Sust conc OR Tourism major with a Sust Tourism conc OR Interdisc Studies major with a Sust conc |
| SOS | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| SOS | 310 | Equity, Justice and Sustainability | Introduces the "social justice" aspects of sustainability science and practice. Sustainability problems are a special class of problems arising from a complex set of issues spread across time, space and institutional scales. These problems can threaten underlying social, economic and ecological systems which are highly intertwined and interdependent. Explore these issues through study of both theory and practice. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 311 | Future Thinking and Strategies | Offers a critical introduction to future-oriented theories and methods. Explores anticipation in contemporary society through a series of cases studies that probe real-world sustainability issues and how the future is created and contested. By characterizing and critiquing future-oriented practices across governmental, academic and private sectors, offers a critical perspective on different methodological approaches and the implications of their use. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 314 | Basic Energy Science | Explains the concepts of the science of energy for those without a background in engineering. Allows non-engineering students to better grapple with the issues that surround sustainable energy issues. Covers the most common methods of electricity generation as well as renewable technologies and fuels. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SOS 314 or SOS 394 (Basic Energy Science) |
| SOS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SOS | 320 | Society and Sustainability | Establishes an understanding of the human, social, and cultural dimensions of sustainability from multi- and interdisciplinary perspectives and at a variety of spatial and temporal scales. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 321 | Policy and Governance in Sustainable Systems | Explores the wide array of political questions that are raised when we view the Earth's environment as an integrated, global system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 322 | International Development and Sustainability | Historical roots of the idea of development, economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sustainability or Business (Sustain) major; SOS 110 and 111 (or PUP 190) with C or better; OR Non-Sustain major with 2 courses: SOS 100, 110, 111 (PUP 190), SOS 300 with C or better; Credit is allowed for only SOS 322 or 530 |
| SOS | 323 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 324 | Sustainable Energy, Materials, and Technology | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 325 | The Economics of Sustainability | Applies economic principles to the allocation of environmental goods and services, external environmental effects, and environmental public goods; decision-making under uncertainty, adaptation to and mitigation of environmental change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 326 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning, and the provisioning of ecosystem services; use of economic and other social science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |

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| SOS | 327 | Sustainable Food and Farms | Food systems and sustainability. Theories of food security, rural livelihood sustainability, and food sovereignty. Critically examines the social, ecological, economic, and institutional dimensions of the many sustainability challenges associated food system activities (production, processing, distribution, consumption, waste). Students develop a food system framework and apply knowledge to an assessment of the sustainability of one aspect of the local food system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 328 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. Delves into more specific case studies of attempts by current businesses to become "greener" and "more sustainable," exploring challenges and opportunities that are commonly found as well as how decisions are often made in today's business settings and by whom. Explores alternative enterprise models and examples of businesses that are using the current context to redefine the sustainability and enterprise. Given the emergent nature of this effort, uses timely and "real-world" examples from current events where possible. Explores and applies an integrated approach to sustainability and enterprise. Readings include popular texts, original research articles and current events. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sustainability or Business (Sustain) major; SOS 110 and 111 (or PUP 190) with C or better; OR Non-Sustain major with 2 courses: SOS 100, 110, 111 (PUP 190), SOS 300 with C or better; Credit for only SOS 328 or 394 (Sustain and Enterprise) |
| SOS | 353 | Perspectives on the Western Diet: Food, Health and Sustainability | Hybrid course covering political, ethical, social and cultural issues inherent in the U.S. food system. Topics include examination of U.S. food guidance; the food system and food environment; the history of food and farm policy; food security and aspects of sustainability in relation to food system impacts on the health of humans, society and the environment. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only NTR 353 or NTR 394 (The Western Diet: Food, Health, & Sustainability) or SOS 353 |
| SOS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: ENG 102 (or ENG 105/108) with C or better; ASB 100 (or 102), SOC 101, SOS 110 or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SOS | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better; Minimum 45 hours completed; Credit is allowed for only ASB or SOS 371; Students who have received credit for ASB or SOS 394 (Inequality and Sustainability) may not enroll in SOC 371 |
| SOS | 372 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; GLG 101 (or GLG 102 or 110 or GPH 111 or SES 121); MAT 117 or higher. Credit is allowed for only GLG 301 or GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| SOS | 373 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| SOS | 374 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone—in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisites with C or better: GLG 101 & 103 or SES 121 & 123; MAT 170 or 171 or 210 or 251 or 265 or 270; PHY 101 or 111 or 121 or 150 or CHM 101 or 107 or 113 or 114 or BIO 100 or 181 or 182 or 281 or 282. Credit is allowed for only GLG 327 or SOS 374 |

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| SOS | 375 | Environmental Anthropology | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and ?use? their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): ASB 100, ASB 102, SSH 100, SOS 100 or SOS 110; Minimum 45 hours; Credit is allowed for only ASB 375, ASB 394 (People: Environment Connections in Anthropology), ASB 494 (Ecological and Environmental Anthropology) or SOS 375 |
| SOS | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Minimum 60 hours; SCM 300 or SOS 110 with C or better. Credit is allowed for only SCM 385 or SOS 385 |
| SOS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SOS | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit allowed for only ASM, BIO or SOS 424 |
| SOS | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 433 | Sustainable Water Use | A clustered learning network on the problem of water scarce regions, includes insights from hydrology, engineering, biology, economics and public policy. May be repeated once for credit. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: MAT 117 or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| SOS | 435 | U.S. Energy: Pathways to Sustainability | Organized around four mores of energy and environmental policy: energy supply, technology for efficiency, environmental sustainability and infrastructure. Also incorporates the wider context of energy and the environment in the society in which we live, taking into account our historic past and future potential life experience with energy availability and use. Through critical examination and analysis of these mores, students apply knowledge to the creation of a comprehensive energy and environmental policy plan that addresses past conditions, present states and future possibilities. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Credit is allowed for only SOS 435 or SOS 494 (Energy and Environmental Policy) or SOS 494 (US Energy: Pathways to Sustainability) or SOS 555 or SOS 594 (Energy & Environmental Policy) |

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| SOS | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210 (or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| SOS | 442 | Sustainability Indicators | Measures of sustainability (or sustainable development), focusing on sustainability indicators and indices (SIs). Discusses key conceptual and methodological issues on gauging sustainability and examines a wide range of sustainability indicators and indices that have been commonly used at global, regional and local scales. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only SOS 442, 494 (Sustainability Indicators and Indices), 542 or 598 (Sustainability Indicators and Indices) |
| SOS | 456 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 36 hours. Credit is allowed for only JUS 456, SOS 456, JUS 394 (Human Rights & Sustainability), or JUS 497 (Seminar in Human Rights) |
| SOS | 465 | Sustainable Urbanism | History, theory, principles and practice of New Urbanism, including current critiques and counter-critiques of both movements. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| SOS | 474 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| SOS | 475 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| SOS | 480 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Challenges students to explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: SOS 110, 111, PUP 190 with C or better if completed; Credit is allowed for only SOS 480 or 494 (Achieving Career Success in Sustainability) |
| SOS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SOS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | School of Sustainability | School of Sustainability | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 110, and SOS 111 (or PUP 190), with C or better |
| SOS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-7 | | Pre-requisites: Sustainability major; Minimum 9 hours of SOS 320, 321, 322, 323, 324, 325, 326, 327, 328 (or SOS 394 ST: Sustainability and Enterprise), 465 (or PUP 465) |
| SOS | 499 | Individualized Instruction | | Y | SEM | Y | Z1 | School of Sustainability | School of Sustainability | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 501 | Foundations of Sustainability | Provides a knowledge base to help students to succeed in the online MSL program. Supports MSL students in the four learning threads of the program, which include communications and sustainability, global context, strategic sustainability and sustainability leadership. | N | LEC | N | YGB | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Sustainability Leadership MSL student; Corequisite(s): EMS 502; EMS 503 |
| SOS | 502 | Tools and Techniques for Sustainability | Forthcoming federal legislation and Executive Orders will set new standards for operational efficiencies, energy and water conservation, use of renewable energy sources, and waste minimization in the Army and Army National Guard. Tools and Techniques for Sustainability presents a systems approach to meet those standards by integrating principles of sustainability into existing Army policies, procedures, and reporting systems. The course features the Framework for Sustainable Strategic Development as an organizing framework to analyze systems and develop strategic plans to move toward sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Global Sustainability Leadership certificate student; Pre-or co-requisite: SOS 501 |
| SOS | 503 | Operationalizing Sustainability | Sustainability is a means to addressing the significant physical, statutory, and regulatory requirements that affect and can encumber the Army's ability to train Soldiers at ranges and maneuver areas across the United States. With hundreds of imperiled species proposed for federal protection in the next few years, threatened and endangered species and sensitive habitat will continue to be a concern. Participants in Operationalizing Sustainability will explore how innovative training practices, improved land and natural resource management practices, and enhanced community relationships can ensure continued access to the land and water assets needed to maintain readiness and can help to "win hearts and minds." Proactive approaches to promoting well-being for soldiers, families, civilians, neighbors, and communities, both at installations and downrange, are stressed. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 504 | Energy and the Built Environment | Provides practical approaches to applying sustainability principles and practices to public works activities, housing, facilities operations and management, military construction, master planning, and energy management. Presents approaches to implement high-performance sustainable building design, construction, operation and management, maintenance, and deconstruction. Also covers cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 505 | Sustainable Military Acquisition and Logistics | Sustainable Military Acquisition and Logistics provides practical approaches to applying sustainability principles and practices to all areas of procurement, acquisition, and logistics. Through weapon systems acquisition or procurement of installation goods and services, the Army hopes to drive innovation and promote sustainability while reducing costs. The inclusions of energy and resource efficiency and other sustainability criteria in acquisition and procurement decisions can reduce long-term operation and maintenance costs, conserve resources, and continue to expand innovation throughout the supply chain. This course introduces the application of sustainability principles to procurement and acquisition, transportation, and material. The use of life cycle analysis and multicriteria assessment for all 10 classes of supply is also featured significantly in the course. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 510 | Perspectives on Sustainability | University-wide course covering basic perspectives on sustainability. Uses case studies; faculty and students from engineering, architecture, social sciences, and natural sciences exchange ideas on the major challenges faced in forming a sustainable future at the local, national, and global levels. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 511 | Transformational Sustainability Research | Enables students to describe, position, compare, and evaluate the key features, strengths, and weaknesses of sustainability research and problem-solving methods. Introduces an integrated methodological framework for sustainability research and problem solving that maps and structures families of methods from description/analysis to strategy building. Addresses all major families of sustainability methods, critically evaluating their specific function, structure, underlying assumptions, validity, reliability, strengths and weaknesses against this overall framework. The method families include not only scientific methods but also practical problem-solving techniques. Integrates two training programs, one on teamwork skills, the other on participatory collaboration with stakeholders. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 512 | Sustainable Resource Allocation | Microeconomic principles of resource allocation applied to environmental goods and services, external environmental effects and environmental public goods; decision making under uncertainty, adaptation to and mitigation of environmental change. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 513 | Science for Sustainability | Carbon cycle, nutrient cycles, carbon and nutrients in the oceans, climate change, oxygen and ozone, solid waste pollution, urban air pollution. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability, the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social data collection methodologies. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GCU or SOS 514 |
| SOS | 515 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 516 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| SOS | 517 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SOS 517 or SOS 591 (Sustainability and Enterprise) |
| SOS | 518 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| SOS | 520 | Research Design and Methods for Sustainability | Provides skills and knowledge that help students design their own research and place it in the context of other disciplines or bodies of work. Not a "methods" class because no specific method is taught indepth. Instead, it is an initial introduction to the research design process and is intended as a platform through which students develop the skills to appreciate and contextualize the approaches taken (and methods used) by others, and during which they can identify the types of specific training they require as they define their own research. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre- or corequisite(s): SOS 510; Credit is allowed for only SOS 520 or SOS 598 (Intro Design/Mthds) |
| SOS | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 525 | Social-Ecological-Technical Systems (SETS): Domains and interfaces | Guide students in developing an integrated approach and framework for thinking about complex systems in a sustainability context. Presents overviews of content, theories and methods from each of the SETS domains (Social, Ecological and Technical Systems); primarily focuses on how to bring these domains together. Explores the SETS interfaces (intersections) from an integrated perspective and equips students to make those linkages in their research and in subsequent elective courses. Each semester students use a sustainability problem or theme to explore the concepts presented in the course. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 527 | Environmental Ethics and Policy Goals | Advanced seminar in applied environmental ethics, focusing on the most influential and policy-relevant approaches in the field of environmental ethics. Core topics include the historical and philosophical foundations of alternative understandings of environmental responsibility; the debate over utility and preservation in environmental policy argument; and the interplay of ethical principles, scientific knowledge and societal priorities in environmental decision making. Consideration of the ethical and value dimensions of biodiversity conservation, wilderness protection, environmental valuation, environmental activism, climate change and sustainability, among other challenges. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 527 or SOS 527 or BIO 591 (Environ Ethics & Policy Goals) |

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| SOS | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 530 | International Development and Sustainability | Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SOS 322 or 530 |
| SOS | 531 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Students explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): SOS 510; Credit is allowed for only SOS 531 or SOS 598 (Achieving Career Success in Sustainability) |
| SOS | 532 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): (degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 533 or SOS 532 |
| SOS | 533 | Sustainable Water | Hydrological, legal, political, and ecological implications of alternative water management strategies; effect of institutional and regulatory frameworks; changes in water demand and supply due to human (population growth, economic changes) and natural (drought, climate change) factors | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 534 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 535 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ELS 535 or SOS 535 |
| SOS | 536 | Food System Sustainability | Broad view of food systems and the sustainability of such systems. Concepts, theory, methods and empirical analyses from diverse disciplines, including agro-ecology, agronomy, political science, agricultural economics, geography, anthropology, and food and nutrition studies. Studentso choose a theme that is a core concern to food system sustainability and pursue that theme in diverse course activities and through engaging in the broader food system we are embedded in as residents in the Phoenix area. Culminates with a term paper/project that synthesizes experience and knowledge, providing a unique perspective on their role in food systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Prerequisite(s): degree- or non-degree-seeking graduate student; Credit allowed for only AML, ESS or SOS 540 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| SOS | 542 | Sustainability Indicators | Measures of sustainability (or sustainable development), focusing on sustainability indicators and indices (SIs). Discusses key conceptual and methodological issues on gauging sustainability and examines a wide range of sustainability indicators and indices that have been commonly used at global, regional and local scales. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only SOS 442, 494 (Sustainability Indicators and Indices), 542 or 598 (Sustainability Indicators and Indices) |
| SOS | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy—especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| SOS | 546 | Life Cycle Assessment for Civil Systems | Covers fundamental and advanced concepts of the life cycle assessment framework exploring products, services, activities and infrastructure systems. Examines key concepts for system boundary selection, functional unit selection, inventorying, impact assessment and interpretation stages with a focus on energy and environmental assessment. Advanced concepts include allocation of effects, problem formulation for assessing footprints versus decisions or policies, and assessment of infrastructure interdependencies and supply chains. Exposes tools and data sources and presents approaches for evaluation of sensitivity and uncertainty of results. Encourages students with broad sustainability interests to enroll and explore how life cycle assessment can aid their work by shifting their views from direct to cradle-to-grave effects. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CEE 506 or CEE 598 (Lifecycle Assessment) or SOS 546 or SOS 598 (Lifecycle Assessment) |
| SOS | 547 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastructure Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastructure Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |
| SOS | 552 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Credit is allowed for only CEE 581 or SOS 552 |
| SOS | 553 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 530 or SOS 553 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 555 | US Energy: Pathways to Sustainability | Organized around four mores of energy and environmental policy: energy supply, technology for efficiency, environmental sustainability and infrastructure. Also incorporates the wider context of energy and the environment in the society in which we live, taking into account our historic past and future potential life experience with energy availability and use. Through critical examination and analysis of these mores, students apply knowledge to the creation of a comprehensive energy and environmental policy plan that addresses past conditions, present states and future possibilities. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only SOS 436, SOS 494 (Energy & Environ Policy) or SOS 494- US Energy: Pathways-to Sustain or SOS 555 or 594 (US Energy: Pathways to Sustainability) or SOS 594 (Energy & Environmnt Policy) |
| SOS | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student, Credit is allowed for only ASM, BIO, or SOS 570 |
| SOS | 577 | Interdisciplinary Writing Seminar | If you want your work to make a difference in the world, you need to be able to communicate your ideas to diverse audiences in a way that is interesting and accessible. Teaches students to write clearly, persuasively, and ethically to people in your discipline, in other disciplines, and outside academia. Approaches writing as a way to think critically and refine ideas, as well as to communicate them to others. | N | SEM | Y | GNA | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is only allowed for ESS 577 or SOS 577 or SOS 598 (Interdisciplinary Writing) or SOS 598 (Writing Seminar) |
| SOS | 578 | Writing Papers for Publication | Students produce a draft of a research paper for submission to a peer-reviewed journal. Analysis of exemplary published papers and narrative strategies, along with peer review, support the writing process. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 1-2 | | Prerequisite(s): SOS 577 or SOS 598 (Interdisciplinary Writing Seminar). Credit is allowed for only SOS 578 or SOS 598 (Writing Papers for Publication) |
| SOS | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 581 | Synthesis for Sustainability Research | Engages students in inter- and transdisciplinary problem solving after they have gained depth of training in content areas, integrative approaches and methods. Students link their own research to the broader field of sustainability. Research. | N | RSC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): SOS 510; 520; 525; 579; Co-requisite(s): SOS 596 or SOS 599 |
| SOS | 582 | Project Management for Sustainability | Provides exposure to the tasks and challenges facing project managers, i.e., those people responsible for the vital function of managing complex projects in sustainability in today's environment. Successful project managers have the abilities and skills to simultaneously manage people, schedules, risks, and resources while delivering successful outcomes. This course is a prerequisite for the MSUS culminating experience. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Graduate Sustainability major; SOS 510. Pre- or corequisite: SOS 511 |
| SOS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 589 | Community of Graduate Student Scholars | Provides the opportunity to develop new skills, to foster cohort building, to interact with other students and faculty, and to network and build support with the alumni network. Overseen by a faculty member but is primarily directed by the students. All MA or MS students take this course each semester. Although there is an overall structure as demonstrated in the course schedule, the specific content of the course varies each semester depending on the needs and interests of the students. | N | LEC | Y | YGB | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 596 | Scientific Paper | MA/MS students are required to devote six hours to conducting research and writing a scientific paper of publishable quality based on the research. The paper topic, the research methodology, and the written format must be approved by the supervisory committee. Students must decide if they will complete the paper on their own or as a group. | N | RSC | Y | YGB | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Sustainability MA or MS student; SOS 510; SOS 579 |
| SOS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 656 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only JUS 656 or SOS 656 or JUS 691 (Human Rights & Sustainability) |
| SOS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |
| SOS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 111 | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 317 | Spanish for the Professions | Advanced-level course that serves as an introduction to the Spanish for the Professions minor or certificate. Develops oral and written skills that prepares students to use their Spanish in their careers and/or professional fields of interest. Also covers several cultural points that facilitate effective interaction with Spanish speakers in the professional world and global community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: SPA 314 or 316 |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 401 | Spanish Oral Communication for the Professions | Students practice their Spanish oral communication skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students gain practice in speaking varieties of Spanish that would assist their communication with monolingual Spanish-speaking Latino clients in formal (professional) and informal contexts in the public sector. Students gain experience in giving public talks, reporting on cultural events and issues in the Hispanic community, participating in simulated workplace exercises requiring the ability to carry out various language functions appropriately in different contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Oral Comm. for Profes) may not enroll in SPA 401 |
| SPA | 402 | Written Communication for the Professions | Students hone their Spanish literacy (reading and writing) skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students read and understand documents in Spanish that they would come across in the process of assisting monolingual Spanish-speakers in the public sector or doing research on the Hispanic community (e.g., birth certificates, academic transcripts, medical reports, criminology documents, newspaper or magazine articles). Students gain practice in creating written documents in Spanish that would assist their communication with Latino clients in formal (professional) and informal contexts or that would allow them to report intelligently on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Written Communication) may not enroll in SPA 402 |
| SPA | 403 | Spanish Grammar and Stylistics for the Professions | Students raise their level of awareness of appropriate grammatical, lexical and stylistic forms to use in their oral and written communication with U.S. Latino clients in formal (professional) and informal contexts in the community (e.g., schools, government agencies, social work settings, medical settings) or for reporting on issues of interest to the Hispanic community. Students enhance their analytical skills by analyzing and comparing Spanish oral and written discourse for genre-appropriate features (stylistics), grammaticality, mechanics, coherence and for a logical flow of ideas in public documents and oral discourses meant for a U.S. Latino audience. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Span Gram & Stylistics for Pro) may not enroll in SPA 403 |
| SPA | 404 | Spanish in U. S. Professional Communities | Students investigate linguistic issues that impact the U.S. Latino community's interaction with professionals (e.g., interaction with service providers in schools, government agencies, social work settings, medical settings; language planning at state and local levels; Spanish spoken in different regions in the U.S.; Spanish language assessment of public sector employees; creation of Spanish for Professional Purposes courses). Students also learn to report on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish in the Community) may not enroll in SPA 404 |
| SPA | 405 | Latino Cultural Perspectives for the Professions | Requires students to investigate the Latino cultural perspectives that underlie and affect communication in the professional world. Students come to understand the historical context that has affected the lives of Latino community in the U.S. and take a critical look at values traditionally associated with Latino culture (e.g., the importance of family ties, fatalism, honor, respecting elders, machismo or marianismo), which provide background information for professionals in the public sector who need to serve the needs of the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Latino/a Cultural Perspect Pro) may not enroll in SPA 405 |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| SPA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 110 | Intensive Spanish I | First-semester intensive course for students who (1) have never taken Spanish language courses before, or (2) have studied Spanish for one year at the high school level, or (3) have authorization from the Spanish section. This six-hour course meets on Mondays, Tuesdays, Wednesdays and Thursdays for 75 minutes in the classroom. To achieve the maximum level of proficiency, the course focuses on the development of speaking and written skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| SPA | 111 | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisite: Maximum 25 hours |
| SPA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 203 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 201. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 203 if they have received credit in SPA201, 202, 204, 311, 312,313,314,315,316,325,412 |
| SPA | 204 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 202. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 204 if credit received in SPA 202, 311,312,313,314,315,316,325, or 412 |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 315 | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | 316 | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: SPA 314 or 316 |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 400 | Introduction to Spanish Linguistics | Introduces the discipline and methods of linguistics through the study of Spanish data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre/co-requisite: SPA 412 or 413; Students who have credit for SPA 400 may not enroll in SPA 539 |
| SPA | 412 | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | 413 | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |
| SPA | 417 | Spanish Phonetics and Phonology | Introduces the theory and practice of Spanish phonetics and phonology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 or 413 with C or better |
| SPA | 418 | Spanish Syntax | Introduces the syntax of the Spanish language by analyzing different word categories, their groupings in phrases, and the structure of both simple and complex sentences. Advanced course that requires some previous knowledge of basic structures of the language and their internal structure. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 412 or SPA 413 with C or better |

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| SPA | 419 | Language Variations of Spanish | Spanish dialectology and variationist/quantitative sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre- or corequisite(s): SPA 417 and 418 with C or better if completed; Credit is allowed for only SPA 419 or SPA 494 (Language Variations of Spanish) |
| SPA | 420 | Applied Spanish Linguistics | Applies linguistic principles to the teaching of Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L | Pre-requisites: SLC 201 or SPA 400 with C or better; SPA 413 |
| SPA | 421 | Spanish in the Southwest | Discussion and linguistic analysis of Southwest Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or SB) & C | Pre-requisites: SPA 412 with C or better |
| SPA | 422 | Spanish Lexicology and Lexicography | Explores the linguistic theory and methodology related to the defining of meanings of words in Spanish dictionaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 |
| SPA | 425 | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 325 |
| SPA | 426 | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 325 |
| SPA | 427 | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: SPA 325 |
| SPA | 428 | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & G | Pre-requisites: SPA 325 |
| SPA | 429 | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 431 | Prose of Golden Age | Focuses on a number of books of canonical prose of 16th- and 17th-century Spain. Spanish Golden Age prose is considered one of the most important bodies of literature both in the Spanish-speaking world and in early modern studies. An astonishing number of works of fiction and nonfiction were written in the period, inspiring artists and intellectuals all over Europe. All readings are representative of genres that, in addition to enjoying popularity in Spain, were extensively translated into other languages throughout Europe. Through a wide readership, <i>Carcel de Amor</i> , <i>el Lazarillo</i> , <i>La Celestina</i> , <i>El Abencerraje</i> , the <i>Novelas ejemplares</i> , and <i>Desenganos amorosos</i> , influenced the system of literary genres. They established a model for successful genres such as the sentimental novel, the picaresque and the Moorish novel, and promoted the reacceptance of the Italian novella in Spain. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): SPA 325 |
| SPA | 434 | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 435 | Cervantes-Don Quijote | Don Quijote and the development of the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: SPA 325 |
| SPA | 454 | 19th-Century Spanish American Narrative | Principal works in the novel, short story, narrative fiction, and narrative (Gauchesque) poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 456 | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 464 | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & C | Pre-requisites: SPA 325 |
| SPA | 471 | Civilization of the Spanish Southwest | Political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & C | Pre-requisites: SPA 314 or 316 |
| SPA | 472 | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | 473 | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |
| SPA | 474 | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 485 | Mexican American Short Story | Critical study of contemporary short stories by Mexican American authors, with emphasis on their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & C | Pre-requisites: SPA 325 |
| SPA | 486 | Mexican American Novel | Social and literary contexts of representative novelists, emphasizing their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 487 | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 325 |
| SPA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |

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| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 520 | Preparing for Professional Careers | Professional training of graduate students who pursue an academic job. Guides these students through their career and provides the tools they need to navigate their new and demanding academic life, not only as current students but also as future faculty. Among others topics, covers the following: research, publishing, surfing the Internet and the library for articles and books, bibliographical matters, conferences and presentations, professional ethics, choosing a dissertation director, writing and publishing the dissertation, first job search, differences among institutions, cover letters, CVs, tenure issues, and balance of personal and professional life. Explores all the practicalities of the academic profession to direct students to the right track from the first day of graduate school. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPA | 534 | Spanish Drama of the Golden Age | Analyzes principal works and figures of Golden Age Drama (Cervantes, Lope de Vega, Calderón, Tirso de Molina, Moreto, Ruiz de Alarcón) with current theater theory and comedia performance . | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 536 | Generation of 1898 | Works of Unamuno, Baroja, Azorín, and their contemporaries, studied against the ideological background of the turn of century in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 537 | Women in Spanish Literature | Major female writers and their texts from Spanish literature (María de Zayas, Ángela Grassi, Concepción Arenal, Emilia Pardo Bazán, Carmen Laforet, Paloma Pedrero) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 538 | Mexican American Women Writers | Major female figures and works in Spanish or translation by contemporary writers (Zamora, Castillo, Corpi, Anzaldúa, L.D. Cervantes, D. Chávez, Duarte, Cisneros) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 539 | General Spanish Linguistics | Introductory course to the study of the linguistic structure of the Spanish language and its various sub fields, such as phonetics, phonology, syntax, morphology and the history of the language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: graduate student; students who have credit for SPA 400, may not enroll in SPA 539 |
| SPA | 540 | History of the Spanish Language | Analyzes and discusses the development of Spanish from Vulgar Latin to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 541 | Spanish Language in America | Discusses and analyzes various regional and social varieties of Spanish in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 542 | Studies in the Spanish of the Southwest | Examines bilingualism and the social and regional dialects of Spanish in the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 543 | Structure of Spanish | Analyzes and discusses data on selected topics in Spanish morphology, semantics, and syntax. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 544 | Spanish Phonology | Surveys problems of Spanish phonology within the context of recent phonological theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 545 | Concepts of Literary Criticism | Aims and methods of modern literary scholarship. Discusses major theories of literary analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 547 | Spanish Pragmatics | Studies the theoretical aspects of pragmatics and their incorporation to the analysis of talk in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 400 or SPA 539 |
| SPA | 552 | Studies in Mexican American Film | Major figures and films by contemporary filmmakers (Sylvia Morales, Cheech Marin, Gregory Nava, Lourdes Portillo, Roberto Rodríguez, Evelina Fernández) interpreted via critical film theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 553 | Latin American Feminist Film | Examines Latin American feminist films in the context of contemporary Latin American culture; films viewed analyzed as casework examples. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only SPA 553 or 583 (Feminist Filmmaking) |
| SPA | 555 | Spanish American Modernism | Principal works and figures of literary modernism, 1880-1920, with emphasis on international literary context of the movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 557 | Contemporary Spanish American Poetry | Major works and problems in contemporary poetry and poetics, with emphasis on Paz, Parra, Cardenal, and new poetry since 1960. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 560 | Medieval Spanish Literature | Major figures and works of the Middle Ages in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 564 | 19th-Century Spanish Prose Fiction | Principal figures and works of realism in the 19th-century novel, with emphasis on Galdós and Clarín. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 565 | 20th-Century Spanish Drama | Principal figures and works of Spanish dramatic literature from the Generation of 1898 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 566 | Generation of 1927 | Major poets of the Generation of 1927, with emphasis on works of Lorca, Guillén, Salinas, and Aleixandre. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 567 | Contemporary Spanish Novel | Major works of post-Civil War Spanish fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 568 | Cervantes | Extensive analysis of the prose and theater of Cervantes as a key figure of the Spanish Golden Age. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 569 | Studies in Spanish Film | Examines major figures and films in Spanish cinema. Critically interprets films through current film theory, history, and critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 572 | Spanish American Drama | Major contributions of Spanish American drama, with emphasis on contemporary dramatists. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 573 | Spanish American Essay | Major works of the essay, within the framework of intellectual history and literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 574 | Spanish American Vanguard Poetry | Examines poetic developments, 1920-1940, with emphasis on Huidobro, Vallejo, Neruda, and the international context of their works. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 575 | Contemporary Spanish American Novel | Principal novels of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 576 | Contemporary Spanish American Short Story | Principal short stories of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 577 | Regional Spanish American Literature | Figures and works of major national (Peru, Argentina, Chile, and Mexico) and regional (Caribbean) literatures. Topics offered on a rotating basis. May be repeated when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 582 | Studies in Latin American Film | Examines the role of film in contemporary Latin American culture; films viewed and analyzed as casebook examples. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 585 | Mexican American Short Story | Major collections and figures in Spanish or translation by contemporary Chicano short story writers (Útica, Suárez, Ulibarri, Soto, Aguilar, P. Martín, Alarcón, R. Sánchez, N. Cantú, J. Sagel, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 586 | Mexican American Novel | Major novels and figures in Spanish or translation by contemporary Chicano novelists (Hinojosa-S., Méndez, Morales, Cota-Cárdenas, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 587 | Mexican American Drama | Major works of Mexican American drama, with emphasis on contemporary playwrights (Valdez, Portillo-T., Morton, Moraga, Gómez-Peña) interpreted via current critical drama theory or other methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 588 | Mexican American Essay | Major figures and essays in Spanish or translation by contemporary essayists (Rendón, Anzaldúa, Villanueva, Rodríguez, Mora, Stavans) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 589 | Mexican American Poetry | Major figures and works in Spanish or translation by contemporary poets (Gonzales, Alurista, L.D. Cervantes, B. Zamora, R. Sánchez, Baca, G. Valdés, J. Montoya, G. Velázquez, T. Villanueva, J.F. Herrera, A. Villanueva) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

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| SPA | 601 | Latin American Feminist Cultural Production | Latin American feminist theory and studies as viewed through cultural production such as literature, film, photography, art. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 791 | Seminar | | Y | LEC | Y | CNV | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 315 | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | 316 | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 412 | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | 413 | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |

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| SPA | 425 | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 325 |
| SPA | 426 | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 325 |
| SPA | 427 | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: SPA 325 |
| SPA | 428 | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L & G | Pre-requisites: SPA 325 |
| SPA | 429 | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 434 | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | 456 | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | 464 | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C | Pre-requisites: SPA 325 |
| SPA | 472 | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | 473 | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |
| SPA | 474 | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: SPA 325 |
| SPA | 481 | Dictatorships and Dirty Wars: Latin American Cinema from Resistance to Reconciliation | Examines aspects of Latin American politics and culture of and through the optic of social unrest. Examines films focusing on the period(s) of recent Latin American history in which there have been social upheavals, dictatorships and state repression, "dirty wars"; understood as clandestine wars waged on the citizenry by the government, social movements from below. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s) with C or better: LAS 205, 206, 330. Credit is allowed for only LAS 481 or SPA 481 or ENG 494 (Dictatorships/Dirty Wars:Lat Am Cinema) or SPA 494 (Dictatorships/Dirty Wars:Lat Am Cinema) |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 487 | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: SPA 325 |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| SPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPE | 316 | Introduction to Physical Disabilities and Other Health Impairments | Introduces various physical disabilities and other health impairments with an emphasis on service delivery in schools and communities. | N | LEC | N | OPT | Institute & Grad Sch Education | Division of Curriculum and Instruction | 3 | | |
| SPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| SPE | 222 | Orientation to Education of Exceptional Children | Legal aspects of special education; legislation, education and community services to meet the needs of students with special education needs. Examines the nature and characteristics of students with developmental disabilities, autism, communication disorders, emotional or behavioral disorders, learning disabilities, sensory impairments, orthopedic impairments, other health impairments, and children with gifts and talents. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB & C | Credit is allowed for only SPE 222 or SPE 311 |
| SPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 310 | Professional Practices and Foundations in Special Education | Foundational themes and issues in special education. Discusses each disability within the mild cross-categorical area in relation to foundational themes and issues relating to professional practices in special education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 317 | Special Education for Culturally and Linguistically Diverse Children and Youth | General issues and practical applications regarding the education of culturally and linguistically diverse students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| SPE | 320 | Assessment and Evaluation of Children with Special Needs | Norm-referenced, criterion-referenced, and formative evaluation to determine eligibility, plan individualized programs, and monitor progress of students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 321 | Classroom and SPE Assessment | Norm-referenced and criterion-referenced assessment and evaluation of student learning to determine eligibility. Plan individualized programs, and monitor progress of students with disabilities while emphasizing integration and adaptation of curriculum, instruction and evaluation of all students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| SPE | 322 | Behavior Management and Consultation | Analysis, intervention, and consultation strategies for effective management of classroom and social behavior for students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 323 | Behavioral Strategies for All Students | Focuses on behavior analysis and classroom management intervention and consultation strategies in general education and special education settings. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Minimum junior standing |
| SPE | 325 | Language Literacy 1 in Elementary Schools | Instructional strategies for teaching reading using systematic research-based phonics to aid decoding; vocabulary; and comprehension development; writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |
| SPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): minimum 45 hours |
| SPE | 396 | Clinical Experience I | Applies course content while working with students with disabilities in inclusive settings. Emphasizes classroom and behavior management. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 397 | Field Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | Y | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 |
| SPE | 410 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| SPE | 411 | Parent Involvement and Regulatory Issues | Emphasizes parent and school relations through effective communication and state and federal regulations impacting services for the handicapped. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing OR enrolled in Early Childhood minor |
| SPE | 416 | Quality Practices in the Collaborative Classroom | Develops skills, strategies, and a knowledge base for preservice teachers in building collaborative partnerships with special educators. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 417 | Inclusion Practices at the Secondary Level | Applies curricular practice and how preservice teachers work with students with special needs in middle and secondary levels. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 422 | Methods and Technology for High-Incidence Disabilities | Assessment and instructional methods for students with high-incidence disabilities including mild intellectual disabilities, learning disabilities, emotional disabilities, and physical/health impairments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): senior standing |
| SPE | 423 | Methods of Cross-Categorical Special Education I | Focuses on implementing research-based strategies in reading, language arts, math and language for students with mild/moderate special needs. Includes using data from all stakeholders in the development of the IEP, making instructional decisions using assessment data, monitoring student progress and developing lesson plans. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPE | 424 | Methods of Cross-Categorical Special Education 2 | Emphasizing pedagogy, content knowledge and evidence-based strategies, focuses on assessment, curriculum development and instruction across content areas (e.g., reading, language, writing mathematics, science, social studies) for students with low-incidence disabilities or intensive support needs (e.g., significant intellectual disabilities, multiple disabilities, orthopedic impairments [OI], and other health impairments [OHI]). Particular focus includes access to the general curriculum, inclusion, instructional and assistive technologies, communication and language disorders, and transition for this population. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 430 | Professional Practices, Foundations, and Collaborative Teaching in Special Education | Foundations of special education; effective collaboration and communication skills and co-teaching models that promote inclusive practices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 431 | Collaborative Teaching Methods for General Education Classroom Environments | Methods and issues in cooperative teaching for special education students in general education classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 478 | Student Teaching in Special Education | Supervised student teaching in the delivery of special education services. Synthesized experience in curriculum, instruction, classroom management and collaboration. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 8 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 495 | Student Teaching in Early Childhood Special Education | Supervised teaching in the early childhood special education classroom setting. Synthesizes experience in curriculum, instruction, classroom organization, and guidance of young children. | N | PRA | N | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): senior standing |
| SPE | 496 | Field Experience III | Applies course content in a special education setting. Emphasizes observation pupil management, planning and delivering instruction, and assessment. | N | PRA | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 559 | Methods for Teaching Diverse Learners | Apprentice teachers select a specific population, based on placement (mild to moderate or moderate to severe), for individualized investigation. Utilizes practical strategies for curriculum development and IEP implementation. Gains a deeper understanding of their practice by analyzing and reflecting for the purposes of monitoring and adjusting instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: MEd Special Education (Teacher Certification) major |
| SPE | 576 | Clinical Experience | Applies course content in special education classrooms: observation, pupil management, planning and delivery of instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Valid copy of AZ DPS fingerprint card on file at ASU; MEd in Special Education major |
| SPE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| SPE | 512 | Individuals with Intellectual Disability | Etiology, diagnosis and management of individuals with intellectual disability. Current trends in prevention, programming and teacher preparation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only SPE 312 or SPE 512 |
| SPE | 520 | Reading and Communication Strategies for Individuals with Autism | Understands and applies reading and communication strategies with individuals with autism and related disorders. Includes historical, diagnostic, and identification issues. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 521 | Foundations of Autism Spectrum Disorders | Increases the understanding of characteristics of individuals with autism. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 524 | Effective Classroom Behavior Management | Organization and delivery of instruction including formative evaluation and techniques of academic behavior management for exceptional children. Requires practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SPE | 531 | Methods of Applied Behavior Analysis for Exceptional Populations | Methods based on the principles and concepts of applied behavior analysis. Students learn to operationally define problem behavior, conduct functional behavior assessment and generate recommendations for the development of behavior analytic interventions. Students gain knowledge and understanding of specific scientifically valid behavior change procedures. Discusses and applies their corresponding literature base. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 534 | Assessment and Evaluation for Children with Special Needs | Discusses assessment practices related to student eligibility and program planning. Emphasizes authentic, individualized, interdisciplinary practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 535 | Curricula, Methods, Technology, and Adaptations in Special Education | Develops strategies for effective adaptation of special education and general education curriculum through use of technology. Includes methods for addressing special needs in reading, math and language disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 536 | Characteristics of Children with Behavioral Disorders | Variables contributing to behavior patterns of behaviorally disordered children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 538 | Language and Literacy I | Instructional strategies for teaching reading using systematic, research-based phonics to aid decoding, vocabulary, comprehension development, writing, speaking, and listening skills. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College MEd or doctoral student; Credit is allowed for only RDG 531 or SPE 538 |
| SPE | 540 | Family-Centered Practices | Provides definitions, models, activities and exploration in the various roles in collaboration, consultation and teamwork in the field of special education. In-depth exploration of connections with families, professionals and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 541 | Consultation Frameworks and Issues | Models, activities, and roles of educational consultants working with families, professionals, and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 548 | Cross-Categorical Foundations: LD, ED, MR, & P/OHI | Foundations course compares cognitive, motor, and affective developmental and educational issues across LD, ED, MR, and P/OHI. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 555 | Inclusive Practices for Diverse Learners | Adapting instruction and assessment to meet the needs of all learners in inclusive settings. Includes the creation of plans to address challenging classroom behaviors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 561 | Characteristics/Diagnosis of Learning Disabilities | Theories related to learning disabilities, including identification and characteristics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 565 | Behavior Change Systems | Focuses on applied behavior analysis-based behavior change systems and procedures. Students learn to identify, implement, manage and supervise interventions based on fundamental elements of behavior change. Addresses behavior change considerations, including ethical use of behavior change systems and ongoing data collection for fidelity and progress monitoring. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate |
| SPE | 566 | Applied Behavior Analysis in Inclusive Settings | Examines definitions, characteristics, assumptions and basic principles of applied behavior analysis. Describes and applies fundamental elements of behavior change, including reinforcement schedules, modeling, shaping, chaining and other behavior change procedures. Activities center on the design and delivery of social skill interventions with individuals with special needs in inclusive settings. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 567 | Ethics of Applied Behavior Analysis | Addresses knowledge and application of the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts. Examines and resolves ethical dilemmas which may be encountered by behavior analysts. Addresses roles and responsibilities of members of a multidisciplinary treatment team comprised of educators, behavior analysts, parents, learners and other professionals. Students conduct risk-benefit analysis of evidence-based treatment approaches and develop declarations of professional practices and procedures for behavior analysts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 568 | Behavior Assessment | Focuses on critical aspects of applied behavior analysis, experimental design and the identification and implementation of effective assessment methodologies. Addresses client-centered responsibilities of the behavior analyst including problem identification, measurement, assessment, data collection and analysis. Students gain experience conducting functional behavior assessment and stimulus preference assessment to inform intervention design. Emphasizes measuring and ensuring treatment integrity. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate. Credit is allowed for only SPE 568 or SPE 598 (Behavioral Assessment) |

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| SPE | 569 | Research Methods in Applied Behavior Analysis | Students gain expertise and practical experience in the interpretation and application of experimental design to inform decision making. Focuses on evaluation of the effectiveness of interventions through use of behavior analytic technologies in clinical and applied settings. Students learn to interpret and describe behavior in behavior analytic terms and explain concepts and approaches in everyday language. Students research and evaluate skill assessment approaches through strategic review of the behavior analytic literature. Course addresses single-subject methodologies to inform design and delivery of effective instruction and clinical interventions. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); SPE 531; SPE 566; Credit is allowed for only SPE 569 or SPE 598 (Research Methods Applied Behavioral Analysis) |
| SPE | 572 | Testing and Measurement in Gifted Education: Methods | Covers current and historical aspects of testing and measurement in the field of gifted education. Topics include: the history and purposes of IQ testing, definitions of various types of tests, purposes of testing for gifted education services, ability tests and achievement measures, how tests are used in Arizona in programs for gifted learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); II Credit is allowed for only SPE 572 or 591 (Testing&Measurement Gifted Ed) |
| SPE | 573 | Differentiating Instruction for Gifted Learners: Teaching Methods | Explores the design of differentiated curriculum and instruction for gifted learners in elementary and secondary education | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SPE 573 or 591 (Diff Curriculum Gifted Child) |
| SPE | 575 | Survey, Issues, and Foundations for the Exceptional Student | Explores the foundations of special education through characteristics and eligibility of exceptional students. Analyzes historical, political, social, and legal factors impacting special education services for exceptional students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 578 | Student Teaching in Special Education | Supervised teaching for graduate students. Synthesized experience in classroom management, curriculum, instruction and assessment. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 579 | Apprentice Teaching in Special Education | Apprentice teaching in special education setting. Must be taken four times for a total of 12 semester hours. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 585 | Creativity: Foundations of Research and Development in Gifted Education | Explores nature of creativity in terms of philosophical underpinnings, empirical evidence, human development, self-actualization, and the ecology surrounding the creative event. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 586 | Advising the Gifted Learner: Social and Emotional Needs | Focuses on educational planning and guidance, social and emotional development, and family problem solving regarding needs of gifted children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 587 | Special Populations in Gifted Education | In-depth analysis of major controversies in educating the gifted, including nature/nurture, the role of mental tests, and sex differences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 588 | The Gifted Learner: Foundations of Identification, Education and Development | Gifted children's characteristics, identification, needs, school and home environments, definitions, and misunderstandings. Research by Pressey, Stanley, Terman, and others. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 589 | Teaching the Gifted Learner: Models, Methods, and Programs | Methods in teaching elementary and secondary school gifted children, including individualized and computer-assisted instruction, team teaching. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |

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| SPE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 597 | Capstone | Applies theoretical and practical information presented through coursework in a real-world setting. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Doctoral student |
| SPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Special Education Doctoral student |
| SPF | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------|
| SPF | 301 | Culture and Schooling | For the professional teacher preparation program. Overview of the cultural, social, and political milieu in which formal schooling takes place in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SPF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SPF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| SPF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPF | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SSH | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease; ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB or SSH 100 |
| SSH | 194 | Covers topics of immediate or special interest to a faculty member and students. | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201, SSH 201 or 294 (Introduction to Epidemiology) |
| SSH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisite: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| SSH | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301. |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SSH | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |
| SSH | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Credit is allowed for only ASB or SSH 355 |
| SSH | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SSH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 400 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| SSH | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |
| SSH | 402 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only ASB 452 or SSH 402 |
| SSH | 403 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisites: SSH 100 or ASB 100; Credit is allowed for only ASB 443 or SSH 403 |
| SSH | 404 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |
| SSH | 405 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| SSH | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SSH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| SSH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SSH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| SSH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| SSH | 502 | Professional Seminar in Global Health | Focuses on skills, ideas, and practice related to the Global Health MA and PhD at Arizona State University. Seminar. Prerequisite: Must be a graduate student in the Global Health degree program. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Pre-requisite: Must be a graduate student in the Global Health degree program |
| SSH | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields. Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Pre-requisites: ASB 511 or SSH 511; Graduate (degree or nondegree) student |

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|---------|-------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------|
| SSH | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| SSH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| SST | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| SST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| SST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 501 | Foundations of Social Transformation | Introduces the foundations of social transformation and social change. Looks at social transformation through an interdisciplinary lens and explores the connections between the objective and subjective factors that enable or inhibit social transformation in different contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 510 | Social and Cultural Pedagogy: Theoretical and Practical Issues | Engages students with the academic literature and scholarly debates on social and cultural pedagogy, reviews practical lessons from the field, and provides an overview of different areas of intervention and professional practice. Considers the historical, local, and international dimensions of social and cultural pedagogy, illustrating them with selected case studies. Encourages the study of social and cultural pedagogy using a critical and interdisciplinary perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| SST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| SST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| STC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 505 | Theories of Social Technology | Examines key theories of social technologies from social and behavioral perspectives. Examines the political dimensions of technologies; technology's role in constructing social structures; and how mobile technologies encourage, structure and delimit social interaction. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 510 | Applied Social Technology | Provides participants with a foundation for understanding how technological systems, large and small, relate to organizational and social change. Case-based approach focuses on how to assess and recommend changes to a variety of types of organizations and communities. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 520 | Advocacy and Social Technology | Examines the potential for social technology in advocating for social change. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 525 | Politics and Social Technology | Concerns the political implications of social technology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 535 | Networked Social Technology | Surveys human and social behaviors from the perspective of networks, with an emphasis on social technology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 537 | Community Informatics | Examines the ways in which communities form, manage themselves, and improve through the use of networked technologies. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 545 | Games as Social Technology | Explores how games as networked and collaborative technologies facilitate community formation, interaction and development. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-4 | | |
| STM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |

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| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| STP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Prerequisite: Freshman status; Maximum 25 earned hours |
| STP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 220 | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 231 | Statistics for Life Science | Concepts and methods of statistics; display and summary of data, interval estimation, hypothesis testing, correlation, regression. Applications to biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 117 or 142 with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 326 | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ACT 415 or STP 326 |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 421 | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | 425 | Stochastic Processes | Markov chains, stationary distributions, pure jump processes, 2-D order processes, and other topics in stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 342 (or 343); STP 421 with C or better. |
| STP | 427 | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | 429 | Experimental Statistics | Statistical inference for controlled experimentation. Multiple regression, correlation, analysis of variance, multiple comparisons, and nonparametric procedures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: STP 420 with C or better |
| STP | 460 | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 495 | Undergraduate Research | Supervised research in statistical or probability studies. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or STP 495 |
| STP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |

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|---------|-------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| STP | 501 | Theory of Statistics I: Distribution Theory 3 | Introduces rigorous probability theory, including distributions and expectations of random variables, transformations of random variables and order statistics, generating functions and basic limit concepts. Supplements the understanding of applied statistics with a firm grasp of the probabilistic underpinnings of theoretical statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only STP 501 or STP 598, Theory of Statistics I |
| STP | 502 | Theory of Statistics II: Inference | Presents techniques and basic results of mathematical statistics at a rigorous level. Develops the structure of statistical inference procedures, including the principles of data reduction, theory of estimation, confidence sets, hypothesis testing, and prediction for common parametric models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 501 with B- or better; Credit is allowed for only STP 502 or STP 598, Theory of Statistics II |
| STP | 526 | Theory of Statistical Linear Models | Multinomial distribution, distribution of quadratic forms, full and nonfull rank models, generalized inverses, unbalanced data, variance components, and the large sample theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 527 | Statistical Large Sample Theory | Types of convergence, central limit theorems, theory of maximum likelihood estimation, efficiency, robustness, influence functions, theory of bootstrap methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 530 | Applied Regression Analysis | Method of least squares, simple and multiple linear regression, polynomial regression, analysis of residuals, dummy variables, and model building. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 531 | Applied Analysis of Variance | Factorial designs, balanced and unbalanced data, fixed and random effects, randomized blocks, Latin squares, analysis of covariance, and multiple comparisons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 532 | Applied Nonparametric Statistics | One-sample test, tests of 2 or more related or independent samples, measures of correlation, and tests of trend and dependence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 533 | Applied Multivariate Analysis | Discriminant analysis, principal components, factor analysis, cluster analysis, and canonical correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 535 | Applied Sampling Methodology | Simple random, stratified, cluster sampling; variance estimation in complex surveys; nonparametric superpopulation approaches; nonresponse models; computational methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 581 | Statistical Consulting Clinic | Provides practical experience in the application of statistical theory and methods to problems from a wide variety of disciplines, exposing students to a diverse range of data types and clients. Develops nontechnical consulting skills, for example explaining statistical concepts to non-statisticians, writing reports, and making oral presentations. | N | PRA | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: STP 530, 531; Credit is allowed for only STP 581 or 598 (Statistical Consulting) |
| STP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|-------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| STP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| STP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| STP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| STP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 220 | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 280 | Probability and Statistics for Researchers | Methods for data summary, numerical summary measures, probability concepts, discrete and continuous probability distributions, expected values, statistics, sampling distributions, point estimation, and introduction to statistical inference for a single parameter. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 251, 265, or 270 |
| STP | 281 | Statistical Analysis for Researchers | Confidence intervals, hypothesis testing, one- and two-factor analysis of variance, simple linear regression, multiple regression, chi-square tests, and introduction to statistical quality control. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 280 |
| STP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 310 | Design and Analysis of Experiments | Factorial and nested designs, randomized designs, randomized complete block designs, Latin squares, fixed and random effects, expected mean squares, multiple comparisons, and analysis of covariance. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MAT 266 (or MAT 271); STP 281 |
| STP | 311 | Regression and Time Series Analyses | Simple linear regression, multiple linear regression, indicator variables, influence diagnostics, stepwise selection, logistic regression, introduction to time series models, autocorrelation, and some ARIMA models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 281 |
| STP | 315 | Statistical Computing | Statistical techniques using a professional statistical programming language (e.g., SAS, R). Emphasizes correct methods, writing and presentation of results. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 281; STP 310 (or STP 311) |
| STP | 326 | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ACT 415 or STP 326 |
| STP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 421 | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | 427 | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | 450 | Nonparametric Statistics | Rank- and order-based tests and estimation procedures for 1 sample and 2 or more related or independent samples, measures of correlation, and introduction to resampling methods, including bootstrap and randomization tests. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 310 |
| STP | 451 | Quality Improvement | In-depth concentration on statistical process control for attribute and variables data, process capability analysis and measurement systems analysis. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): STP 281 |

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| STP | 452 | Multivariate Statistics | Statistical analysis of multivariate data including methods for preparation and presentation of multivariate data, MANOVA, discriminant analysis, principal component analysis, factor analysis, cluster analysis, random forests and classification trees. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 311; MAT 343 |
| STP | 460 | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | 485 | Statistics Capstone | Students work in a team and partner with a client to solve a real-world problem requiring statistical analyses. Emphasizes problem development, integration of technical skills, teamwork and communication among the students and with the client. Requires regular meetings and presentations with team, client and faculty advisor. | N | LEL | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: Senior standing; STP 310, 311, 6 additional hours of upper-division STP excluding STP 492, 493, 498, 499 |
| STP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| STP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STS | 101 | Introduction to Science, Technology, and Society | Overview of the basic issues, definitions, and literature involved in the study of science, technology, and human systems. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 110 | Global Technology and Development | Introduces awareness and understanding of how technology, processes of globalization, and society influence one another. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 202 | Science, Technology, and Diversity | Examines the concept and meaning of the "technology gap" and its implications of the global impact of scientific and technological advances. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 235 | Technology and Urban Systems | Focuses on the relationship between technology and urbanization, especially on how technological innovation and change impact all aspects of urban systems, including urban social and economic development, sustainability, governance, environmental, and community change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 250 | Science, Society, and Global Warming | Addresses global warming and its implications for society, including evidence and components of warming, measurement of warming and global change, and the social and political aspects of change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Students who have credit for STS 294 (Society and Global Warming) may not enroll in STS 250 |
| STS | 260 | Politics of Science and Technology | Explores the relationship among government, politics, science, and technology, especially the interdependence of public policy and science and technological pursuits. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 301 | Research in Science and Technology Studies | Examines methods of inquiry in the social sciences with emphasis on STS, including both qualitative and quantitative approaches, philosophy of science, and scientific revolutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 302 | Philosophy of Science and Technology | Focuses on the nature and implications of science as a body of knowledge, set of practices, specific methods, and how these differ from other human enterprises and activities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |

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| STS | 303 | History of Science and Technology | Examines the history of technology within social, cultural, political, and economic contexts and the critical relationship between society and technology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | H | Prerequisite(s): minimum 45 hours |
| STS | 304 | Science, Technology, and Society | Overview of the major issues associated with the study of science, technology, and human systems, including theoretical approaches. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 305 | Science and Social Theory | Explores the different theoretical traditions that inform social interpretations of science, including awareness of the historical traditions that define these interpretations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 306 | Social Effects of Science and Technology | Examines the effects of science and technology on social life and the contexts in which those effects manifest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 317 | Science, Technology, and Global Engagement | Overview of international issues associated with both the development and deployment of technologies, including matters concerning international relations. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 318 | Science, Technology, and Government | Examines the foundations of the interrelationship of science, technology, and democratic governance, with emphasis on the American political system. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 325 | Science, Technology, and Public Policy | Examines the interaction of science and technology with American domestic policy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 328 | Science, Technology, and Culture | Overview of technology and international cultures, including cultural definitions of science and technology. May intersect issues of culture and religion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 329 | Cultivating Technology in Newly Industrializing Countries | Covers specific issues relating to building technological capability in newly industrializing countries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 330 | Information Technology and Globalization | Examines the intersection of advances in information technology and globalization and the impact of these processes on human systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 331 | Ethical Issues in Science and Technology | Examines the interconnections between values and science and technology by examining such topics as computers and privacy, medical malpractice, reproductive technologies, patents, and hazardous facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 332 | Global Issues in Science and Technology | Examines contemporary international debates in science and technology and how those issues impact globalization. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 364 | Science, Technology, and National Security | Examines how changing technologies impact all aspects of national security policy in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| STS | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 401 | Statistics in Science and Technology Studies | Introduces statistical techniques for the social sciences, including the role and rationale of statistics, descriptive measures, associational measures, and inferential statistics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: MA general studies requirement satisfied |
| STS | 425 | Law, Values, Science, and Technology | Examines the interconnections of law, values, and science and technology with a view to establishing their reciprocal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| STS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| STS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SWG | 501 | Micro Human Behavior in the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre/Co-requisite: masters or doctoral in Social Work major |
| SWG | 502 | Macro Human Behavior in the Social Environment | Human behavior in the social environment, focusing on groups, organizations and communities and examining theoretical perspective in a macro context. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite: MSW or DSW student |
| SWG | 510 | Foundation Practice I | Basic social work methods with emphasis on the problem-solving process as it pertains to individuals, families, and small groups. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Must be Master or Doctor Social Work student. |
| SWG | 511 | Foundation Practice II | Theory and methods of direct practice with groups and selected practice models. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 510 with C or better |

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| SWG | 514 | Bridge Seminar I | Professional social work practice at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 516 |
| SWG | 515 | Bridge Seminar II | Generalist practice problem-solving skills with diverse individuals, groups, families and systems at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Adm and Community Practice) major. Corequisite(s): SWG 516. Pre- or corequisite(s): SWG 514. Credit is allowed for only SWG 515 or SWG 598 (Bridge Seminar II). |
| SWG | 516 | Social Work Skills Seminar | Focuses on the acquisition of practice skills for advanced interaction with individuals, families, groups and communities. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 514, 515 |
| SWG | 519 | Research Methods in Social Work | Conceptual foundations and methods of nomothetic research in social work. Includes problem identification, hypothesis formulation, measurement, sampling, and experimental design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 526 | Mental Health for Sentencing | Helps justice system professionals understand existing mental health diagnoses, the DSM-5, and how specific DSM-5 categories are associated with specific types of crime. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 527 | Mitigation of Death and Life Cases | Issues and skills for practicing as a mitigation specialist in cases of death and life without parole. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 528 | Presentence Investigations | Examines the functions and objectives of presentence investigation reports and prepares students to perform different types of investigations for limited and general jurisdiction courts for local, state and federal courts. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 529 | Alternatives Penal Sanctions | Prepares individuals to practice as sentencing advocates on defense teams, as consultants to problem-solving courts, or as private presentence investigators hired by the defense to advocate for alternatives to incarceration. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 531 | Social Policy and Services | Conceptual, analytical, and historical perspectives on the social welfare institution. Emphasizes poverty and inequality. Principles of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral of Social Work student |
| SWG | 533 | Diversity and Oppression in a Social Work Context | Explores issues of social inequality related to disability, ethnicity, gender, race, and sexual orientation. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student. |
| SWG | 541 | Field Practicum I | With SWG 542, two consecutive semesters (480 hours) of supervised social work practice in an approved placement. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Master or Doctor Social Work student; Pre/Co-requisite: SWG 510 with C or better if completed |
| SWG | 542 | Field Practicum II | See SWG 541 | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Master or Doctor of Social Work major; SWG 510 and 541 with C or better. Pre- or corequisite(s): SWG 511 with C or better if completed |
| SWG | 554 | Substance Abuse | Psychological and sociocultural determinants of substance abuse. Overview of social policies and treatment approaches. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 556 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 456, 556 or 591 (Immigrants and Refugees) |
| SWG | 557 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWG | 558 | Introduction to Behavioral Health Services | Explores mental health. Develops a basic understanding of mental health and co-occurring conditions. Gains an understanding of public- and employer-financed contemporary behavioral health services with a focus on Arizona models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Introduction to Behavioral Health Services) or 558 |
| SWG | 559 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 459, 591 (Spirituality & Helping Profession), 598 (Spirituality and the Helping Professions) or 559 |
| SWG | 560 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Legal Issues in Social Work) or 560 |
| SWG | 561 | Lesbian, Gay Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 461, 498 (Lesbian and Gay Issues) or 561 |
| SWG | 562 | Global Social Welfare | Analyzes social work's response to international social issues and human need from the perspectives of globalization, development and human rights. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 562 or SWG 591 (International Social Work) or SWU 462 or SWU 498 (International Social Work) |
| SWG | 570 | Aging: A Biopsychosocialspiritual Perspective | Biopsychosocialspiritual perspectives on aging, including intergenerational matters, international trends, policies, programs, services and issues unique to populations of the Southwest. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 570 or SWG 591 (Aging Soc Wk Perspective) |
| SWG | 571 | Mental Health Aspects of Aging | Older adult mental health assessment, treatment, planning, policy and service delivery from a cross-cultural, interprofessional, intergenerational, international and continuum-of-care perspective. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Mental Health & Aging) |
| SWG | 572 | Interprofessional Approaches to Healthy Aging | In-depth examination of healthy aging, interprofessional practice and interprofessional practice approaches designed to foster healthy aging for older adults. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SWG | 577 | Traumatic Death: Theory, Counseling and Practice | Explores the various experiences of grief, trauma and bereavement through a phenomenological perspective and using creativity, art, literature, poetry, indigenous wisdom and evidence-based research. Practice techniques and psychosocial care to the traumatically bereaved. Examines the micro, mezzo and macro aspects of death and grief in contemporary society. Theory, philosophy and direct practice with individuals, families and groups experiencing traumatic death and grief. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWG 577, 591 (Trauma & Death Counseling) or 598 (Trauma&Death: Counseling, Theory, &Practice Issues) |
| SWG | 579 | Critical Incident Stress Management | Theory and research behind coping strategies and mechanisms commonly experienced by Emergency Management Teams (EMT) and DHS. Explores topics of stress, trauma, vicarious trauma and mass trauma as experienced by the individual and large populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 585 | Macro Social Work Practice | Examines communities and human service organizations as social systems. Introduces strategies for initiating planned change. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisites: Master Social Work student |
| SWG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 600 | Foundation for Advanced Practice | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Master Social Work student. |
| SWG | 603 | Social Work Practice in Health/Behavioral Health Settings | Advanced social work practice in health and behavioral health settings, focusing on enhancement of client functioning and quality of life. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major I |
| SWG | 604 | Advanced Social Work Practice in Health | Addresses the crucial social work practice issues of health and healthcare in the new millennium. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 with C or better |
| SWG | 606 | Assessment of Mental Disorders | Theories and concepts of mental health and illness. Attention to classification systems and nomenclature used in assessing mental disorders. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 502 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 608 | Ecological Approach to Practice with Children, Youth, and Families | Provides a theoretical and practical orientation to working with children, youth, and families from an ecological strengths perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 609 | Advanced Social Work Practice with Child Welfare Families | Focuses on substance abuse, family violence, and serious mental illness in practice with families and children in the child welfare system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 610 | Advanced Social Work Practice III | Assists students in advanced theoretical understanding and practice with families, groups, and communities. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW or MSW Adv Standing student; Co-Requsite: SWG 693 and 645 |
| SWG | 611 | Social Work with Families | Theory, concepts, and skills for working with diverse family populations. Emphasizes a systems and integrative approach. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 612 | Social Work with Groups | Practices applications of knowledge and skill to social work with groups. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 613 | Advanced Social Work Practice in Behavioral Health | Treatment of prevalent disorders encountered by social workers, selected from the following: anxiety disorders, personality disorders, depression, and schizophrenia. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 603 with C or better |
| SWG | 614 | Advanced Generalist Social Work Practice IV | Integrates a multilevel approach to practice with critical choice theories and interventions. Focus on groups, organizations, and communities and their impact on social work practice. Completion of the foundation courses or advance standing in the MSW program, or instructor approval, is required for all 600- level SWG courses. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG611 with a grade of C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SWG | 617 | Advanced Social Work Practice with Children and Adolescents | Theory, research, and intervention that focus on children and adolescents. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 618 | Advanced Practice in Domestic Violence | Theory, research, intervention, and prevention strategies relevant to child maltreatment, partner abuse, and elder abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 619 | Practice-Oriented Research | Accelerated course in application of scholarly and scientific principles to field practice, problem formulation, interventional procedures, and impact assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 519 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 621 | Integrative Seminar | Explores the fit between theoretical frameworks and practice with clients. Requires presentation of empirical studies with clients. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s) with C or better: SWG 603 or SWG 608, 619. Pre- or corequisite(s): SWG 604, 606, 609, 613, 617 with C or better if completed; SWG 641 with Y if completed |
| SWG | 623 | Program Evaluation | Research design techniques and data collection in human service agencies and communities. Analysis for program evaluation and needs assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 519 with C or better, SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 685 |
| SWG | 626 | Crisis Intervention and Short-Term Treatment | Comprehensive analysis of crisis and solution-focused brief intervention strategies and approaches used in advanced social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 630 | Brief Social Work Intervention | Concepts and techniques of solution-focused, systematic, and strategic approaches to therapy in the context of brief therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major |
| SWG | 632 | Policy Practice | Develops advanced knowledge and skills in social welfare policy analysis, policy formulation, and advocacy and intervention for policy change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 531 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 633 | Child Welfare Services | Examines, using ecological and system theories, services that supplement, support, and substitute for parental care of children. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 641 | Advanced Practicum: Direct Practice I | With SWG 642, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) major. Pre- or corequisite(s): SWG 603 (or SWG 608) with C or better if completed |
| SWG | 642 | Advanced Practicum: Direct Practice II | With SWG 641, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 or 608 with C or better; SWG 641 with Y; Pre or Co-requisite: SWG 604, 609, 613 or 617 (with C or better if completed) |
| SWG | 643 | Advanced Practicum: Planning, Social Work Administration, and Community Practice I | With SWG 644, two consecutive semesters (480 hours) in social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Planning, Administration and Community Practice) major. Pre- or corequisite(s): SWG 623, 685 with C or better if completed |
| SWG | 644 | Advanced Practicum: Planning, Social Work Administration, and Community Practice II | See SWG 643. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 623 with C or better. Prerequisite(s): SWG 623, 685 with C or better, SWG 643 with grade of Y. Pre- or corequisite(s): SWG 681, 682 with C or better if completed |
| SWG | 645 | The Professional Experience III | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. <u>Y/E grade only.</u> | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student; SWG 542 with Y grade OR MSW Advanced Standing student; Co-requisite: SWG 610 and SWG 693 |
| SWG | 646 | The Professional Experience IV | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. <u>Y/E grade only.</u> | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Standard MSW or MSW Adv Standing student; SWG 645 with Y grade; Co-requisite: SWG 614; SWG 693 |
| SWG | 654 | Introduction to Sexual Abuse | Develops general knowledge and skills for working with persons who have been impacted by sexual abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 655 | Quality of Life | Addresses key elements of a healthy life style contributing to wellness and disease through experiential learning and evidenced-based research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major or Assessment of Integrative Health Modalities certificate |
| SWG | 656 | Treating the Whole Person | Addresses treating the "whole person's" physical and behavioral health through interviewing, intervention, and treatment within the context of an interdisciplinary model. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major or Assessment of Integrative Health Modalities (certificate) |
| SWG | 657 | Ancient Healing Traditions | Historical development and research of the ancient healing teachings of traditional Chinese medicine, Ayurvedic medicine, homeopathic, naturopathic, and indigenous medicine and how they are used in today's health systems. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 660 | Clinical Supervision in Social Work. | Examines and practices the knowledge, skills, and values of becoming a social work supervisor in human service agencies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWG | 661 | Cognitive Behavior Therapy Across the Lifespan | Knowledge and skills to understand and apply cognitive-behavioral approaches to treatment (CBT), including diagnostic information and empirically supported interventions targeted to individuals, families and groups across the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Cognitive Behavior Therapy Across Lifespan) or 661 |
| SWG | 662 | Social Work Practice With Adolescents | Advanced elective focuses on working with adolescents in a variety of intervention settings (e.g., mental health agencies and schools). | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Social Work Practice With Adolescents) or 662 |

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| SWG | 663 | Clinical Trauma Treatment | Explores the assessment and treatment of PTSD in people throughout the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Clinical Trauma Treatment) or 663 |
| SWG | 664 | Evidence-Based Approaches to Treatment of Substance Use Disorders | Knowledge and skills to understand substance abuse disorders, including diagnostic information and evidence-based interventions targeted to individuals, families and groups. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Treatment Substance Use Disorders) or 664 |
| SWG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | IND | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 681 or SWG 682 with C or better; Pre/ Co-requisite: SWG 623 with C or better if completed |
| SWG | 681 | Social Work Administration | Administrative skill building and theory application within human service nonprofit social work settings. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 623 with C or better; SWG 685 with C or better; Co-requisite: SWG 682 |
| SWG | 682 | Community Participation Strategies | Reviews strategies to involve citizens and the consumers of social and human services in community decision-making systems. Participation is viewed as a means to facilitate the empowerment of oppressed peoples. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 623 with C or better; SWG 685 with C or better; Co-requisite: SWG 681 |
| SWG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 685 | Program Planning in Social Services | Social services planning process; includes needs assessment, goals and objectives, program design, budgeting, management information systems, and program evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y; SWG 585 with C or better OR MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major; Corequisite(s): SWG 623 |
| SWG | 686 | Developing Grants and Fund Raising | Identifies potential funding sources, technical and interpersonal/political aspects of proposal development and fund raising. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 687 | Public Policy and Advocacy | Covers public policy at the federal level, including administrative, legislative and judicial policy. Students understand how to develop congressional policy and methods to engage in advocacy at the federal level to impact macro social work practice. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 687 or SWG 591 (Advocacy and Public Policy) |
| SWG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: MSW or MSW Advanced Standing student |
| SWG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisites: MSW, MSW Adv Standing, or PhD student |
| SWG | 700 | Research Methods | Course on research methods in a specific discipline. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 718 | Qualitative Research Methods | Provides comprehensive qualitative research methods training for doctoral students to complement their quantitative survey research methods knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 718 or 791 (Qualitative Research Methods) |
| SWG | 719 | Quantitative Research Methods | Provides the tools for independently designing and conducting methodologically sound, ethical, quantitative research that advances social work and social welfare knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student |
| SWG | 720 | Philosophy of Science Issues in Social Work | Critical examination of social science, social work practice, and policy in terms of philosophical assumptions and varying frames of reference. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 721 | Statistics | Logic and application of statistical methods for analyzing social welfare-based data pertaining to social work. Includes ethical issues concerning the appropriate application, interpretation and use of social research, as well as the potential limitations and biases of applications that fail to adequately consider issues of population diversity. Students learn to independently design a research project from start to finish employing statistical analysis of primary data. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: doctoral major |

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| SWG | 722 | Pedagogy in Social Work | Prepares doctoral students to teach for the profession of social work. Provides an opportunity for students to develop or enhance their philosophy of teaching, their attitudes toward learning, teaching and students, and the knowledge and skills necessary to teach effectively. Explores teaching to the diverse students present in social work programs, the challenges that teaching presents and the responsibilities that come with social work education. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Doctoral student; Credit is allowed for only SWG 722 or SWG 791 (Pedagogy in Social Work) |
| SWG | 723 | Proposal Development | Provides an opportunity for doctoral students to formulate a dissertation proposal or a research plan for a three-paper option. Provides a forum for presenting ideas, receiving feedback and defending one's proposal. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 723 or 791 (Proposal Development) |
| SWG | 731 | Welfare State | Examines the evolution of the welfare state as a problem of political economy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 731 or 791 (Welfare State) |
| SWG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | |
| SWG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWU | 171 | Introduction to Social Work | Descriptive and historical perspectives of social problems, social justice issues and society's response to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & H | |
| SWU | 180 | Introduction to Lesbian, Gay, Bisexual and Transgender (LGBT) Studies | A historical, socio-cultural introduction to lesbian, gay, bisexual, transgender, transsexual, and intersexed communities and their resilience to challenges and barriers. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Credit is allowed for only SWU 180 or 194 (Introduction to LGBT Studies) |
| SWU | 181 | Economics: A Social Issues Perspective | Introduces economic principles through the lens of contemporary social issues for social work and related fields. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 181 or 194 (Economic and Social Issues in Perspective) |
| SWU | 182 | Social Services Perspective of Government | Explores levels of government and policy practice in advancing social and economic justice and effective social services within the Southwest. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Credit is allowed for only SWU 182 or 194 (AZ/National Government: Social Work Perspective) |
| SWU | 183 | Introductory Ethics: A Social Issues Perspectives | Introductory exploration of ethics from a historical and multicultural perspective viewed through the lens of contemporary social issues. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 183 or 194 (Intro Ethics: Social Issues Perspective) |
| SWU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 250 | Stress Management Tools I | Helps students develop an understanding and behaviors to create a healthy balance in their lives by studying the bio/psycho/social aspects of wellness. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | |
| SWU | 291 | Social Service Delivery Systems | Federal, state, private not-for-profit and for-profit social service delivery system's purpose, structure, and professional roles. Includes 40 volunteer hours. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: PSY 100, PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU 171 with a C or better if completed |
| SWU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | SB | |
| SWU | 295 | Foundations of Social Work Practice | Theoretical foundation and skill base for effective culturally competent communication and interviewing with individuals, families, small groups, and larger systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Pre-requisites: PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU171 or 271 and SWU 291 with a C or better if completed |
| SWU | 302 | Human Biology for Social Workers | Overview of human anatomy and physiology, and the reciprocal relationship between physical and social environments. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWU | 303 | Micro Human Behavior and the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | L or SB | Prerequisite(s): PSY 101; SOC 101 or 301; Pre- or corequisite(s): SWU 171, 291, 295 with C or better if completed, OR Community Advocacy and Social Policy major |
| SWU | 306 | Ethics in Social Services | Focuses on following the NASW Code of Ethics in making ethical decisions in social service settings. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; PHI 101 or 105 or 306 or SWU 183; SWU 291; lower-division (L) course |
| SWU | 310 | Social Work Practice I | Introduces social work methods, emphasizing the following skills: relationship development, cross-cultural interviewing, communication patterns, and case-recording. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 171 or SWU 271 with C or better; SWU 291 with C or better; SWU 295 with C or better; Pre or Co-requisite: SWU 303 (with C or better if completed) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SWU | 311 | Integrative Social Work Practice | Social work practice skills emphasizing cross-cultural interviewing, assessment and professional recording. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 171; SWU 291; SWU 295; Corequisite(s): SWU 312; Pre- or corequisite(s): SWU 306 |
| SWU | 312 | Integrative Social Work Practice Skills | Applies social work content from SWU 311 focusing on practice skills and professional behavior. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 171; SWU 291; SWU 295; Corequisite(s): SWU 311; Pre- or corequisite(s): SWU 306 |
| SWU | 320 | Research Methods in Social Work | Applies scientific principles to field practice, problem formulation, intervention procedures, and impact assessment in social work. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre- or corequisite(s): SWU 310 with C or better if completed, or Community Advocacy and Social Policy major |
| SWU | 321 | Statistics for Social Workers | Teaches social work students how to use and interpret descriptive and inferential statistics in social work practice. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | CS | Pre-requisites: MAT 142 or an MA general studies course |
| SWU | 332 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Community Advocacy and Social Policy major; POS 110 or POS 310 or SWU 182 |
| SWU | 340 | Macro Human Behavior and the Social Environment | Human behavior in the social environment, focusing on groups, organizations and communities and examining theoretical perspectives in a macro context | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Prerequisite(s): SWU 303 with C or better; Pre- or corequisite(s): SWU 310 with C or better if completed OR Community Advocacy and Social Policy major |
| SWU | 349 | Stress Management Tools II | Developing mindful strategies toward managing stress, developing instinct awareness; healthy decisions in nutrition, relationship with self, others and creating a personal carbon footprint. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 349 or SWU 294 (Stress Management Tools II) |
| SWU | 350 | Whole Person Health Across the Lifespan | Development of mindful strategies toward managing stress and identification, implementation and integration of skills and knowledge for well-being across the lifespan. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| SWU | 351 | Sustainable Living, Mindful Eating | Addresses issues related to foods we eat, how we eat, and impacts of choices on health, the environment, locally and globally. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| SWU | 374 | Diversity and Oppression in a Social Work Context | Issues of social inequality related to race, ethnicity, gender, sexual orientation, and disability. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre- or corequisite(s): SWU 310 with C or better if completed, or Community Advocacy and Social Policy major |
| SWU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisite: Master of Social Work student |
| SWU | 410 | Social Work Practice II | Knowledge and skills in social work practice with individuals and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 310 with C or better; PHI 101 (or PHI 105, 306 or SWU 183); BSW Social Work major. Corequisite(s): SWU 412, 413 |
| SWU | 411 | Social Work Practice III | Knowledge and skills in social work practice with groups, communities, and organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 410, 412, or 413 with C or better or Co-requisites: Social Work student with SWU 414; SWU 415 |
| SWU | 412 | Field Instruction I | 16 hours a week of supervised practice in an approved placement. "Y/E" grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 413 |
| SWU | 413 | Field Instruction Seminar | Field-focused seminar, including practice evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 412 |
| SWU | 414 | Field Instruction II | 16 hours a week of supervised practice in an approved placement. Y/E grade only. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 410; SWU 412 or SWU 413 with C or better Co-requisites: SWU 411 and SWU 415 |
| SWU | 415 | Integrative Field Seminar | Field-focused seminar to help students integrate practice and theory. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Social Work student; SWU 410, SWU 412 or SWU 413 with C or better; Corequisite(s): SWU 411 and SWU 414 |
| SWU | 432 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ECN 211 (or SWU 181); POS 110 (or POS 310 or SWU 182); SWU 310 with C or better; Social Work major. Corequisite(s): SWU 410, 412, 413 |
| SWU | 442 | Introduction to Practice with Children and Families in Child Welfare | Focuses on the characteristics, strengths, and service needs of families and children in the Child Welfare System. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Social Work student; SWU 410 with C or better; SWU 412 with C or better; SWU 413 with C or better |
| SWU | 450 | Mastering Mindfulness | Facilitates mastering mindfulness practice. Students teach a lesson and develop a training proposal that will be implemented and evaluated. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre- or corequisite(s): SWU 350; SWU 351 |
| SWU | 456 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 456, 498 (Immigrants & Refugees) or 556 |
| SWU | 457 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWU | 458 | Behavioral Health Services | Behavioral health conditions; their impact on the individual, family and community; and historical and contemporary service models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 458, 498 (Behavioral Health Services) or 558 |
| SWU | 459 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 459, 494 (Spirituality and the Helping Professions), 498 (Spirituality & Helping Profession) or 559 |
| SWU | 460 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 460, 498 (Legal Issues in Social Work) or 560 |
| SWU | 461 | Lesbian, Gay, Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 461, 498 (Lesbian/Gay Issues) or 561 |
| SWU | 462 | Global Social Welfare | Analyzes social work's response to international social issues and human need from the perspectives of globalization, development and human rights. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): junior standing; Credit is allowed for only SWG 562 or SWU 462 or SWU 498 (International Social Work) |
| SWU | 474 | Ethnic/Cultural Variables in Social Work | Basic conceptual approach to understanding ethnic and cultural variables of southwestern ethnic minorities and how these factors influence social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: SWU 310 with C or better |

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| SWU | 488 | Advocacy Strategies | Comprehensive advocacy approach that spans administrative, legislative and community strategies. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 320; SWU 332; SWU 340; SWU 374; senior standing |
| SWU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | | Prerequisite(s): Barrett Honors student |
| SWU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SWU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-7 | | |
| SWU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-3 | | Pre-requisite: Bachelor of Social Work student |
| TBX | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0.33-12 | | Prerequisite(s): Thunderbird Teach-Out students |
| TCL | 101 | Introduction to Transborder Chicana/o and Latina/o Studies | Historical and contemporary issues in Chicana/o and Latina/o communities; focuses on the diverse economic, sociological, cultural, and political status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 111 | Introduction to Transborder Chicana/o and Latina/o Culture | Interdisciplinary analysis of customs, values, belief systems, and cultural symbols; special attention is given to cultural continuity and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 201 | Transborder Society and Culture I: Interdisciplinary Approaches | Intensive overview of Mexican origin and Latina/o populations through various sociological, historical, anthropological, economic, political, cultural, literary, and analytical lenses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 202 | Transborder Society and Culture II: Contemporary Issues | Examines contemporary transborder belief systems, ideologies of health, gender, familial structures, and community development within a transnational context. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| TCL | 211 | Transborder Chicano/a and Latino/a Poetry | Writing seminar on Chicana and Chicano poetics and intensive creative writing workshop. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 220 | Transborder Latina/o Expressive Culture | Examines media, literature, performance, and visual art grounded in the historical experiences of transborder Latina/o communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | |
| TCL | 230 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| TCL | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Credit is allowed for only FMS 270 or TCL 270 |
| TCL | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| TCL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 303 | Transborder Theory | Studies historical, cultural, and economic theories contributing to understanding the emergence of Mexican and Latina/o origin populations in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 304 | Transborder Research Methods | Emphasizes critical skills: quantitative/qualitative, spatial, archival, and reflexive methodologies, including ethnographic, biographical, historical, and mapping. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 305 | Transborder Practicum and Field Research. | Field work with faculty incorporating practical experience while honing research skills and ability. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre or Co-requisites: TCL 303 and TCL 304 with C or better if completed |
| TCL | 310 | Transborder Chicano/a and Latino/a Folklore of Southwest North America | Analyzes Chicana and Chicano folk beliefs, traditions, and practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |

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| TCL | 314 | Transborder Regional Immigration and Economy | Historical/contemporary overview of Mexican immigration into and within the U.S.; factors affecting population movement, settlement patterns, and migrants' incorporation into society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & H & C | |
| TCL | 315 | Chicana/o and Latina/o Family Structures | Traditional and changing family relationships; emphasis on gender and intergenerational relations and impact of modern society on traditional family values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 321 | Transborder Community Development and Health | Emphasizes core concepts and practices relevant to regional community development and health, including demographic health indicators, individual, and community models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 323 | Latino Health Issues | Health issues among Chicanos and other U.S. Latinos; interplay among political economy, health, family, culture, and community. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 4 | SB & C | |
| TCL | 326 | Health of Chicanas and Latinas | Examines gender, ethnicity, and health; critical issues affecting health status of Chicanas and Latinas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 327 | Health and Migration | Focuses on health status among various immigrants; health trajectories following migrations, adaptive behaviors, health practices, and the role of policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 328 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: Minimum 24 earned hours; ENG 102, 105, or 108 with C or better; Credit allowed for only REL 326 or TCL 328 |
| TCL | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| TCL | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| TCL | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and African Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| TCL | 340 | Chicana/o and Latina/o Politics and Policy | Historical/contemporary analysis of Chicana and Chicano political ideologies, attitudes, strategies, and movements; relations with governmental agencies; and public policy issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | |
| TCL | 341 | Policy Issues in Chicana/o and Latina/o Urban Settings | Historical, demographic, and sociological overview of the status of Chicanas and Chicanos in urban settings as well as the public policy relevance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 342 | Social Demographics of Latino Populations | Provides an introduction to social demography of Latinos in the U.S. from the 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 350 | Transborder Mexican and Chicano/a Artistic Production | Overview of Mexican and Mexican American artistic production from colonial times to present; emphasis on religious and folk art. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C & G | |
| TCL | 351 | Transborder Chicano/a and Latino/a Art | Intensive analysis of contemporary Chicana and Chicano art movement as appraised within the context of contemporary American art and the art of Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| TCL | 360 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| TCL | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Pre-requisites: ENG 101, 105 or 107; Credit is allowed for only ENG or TCL 363 |
| TCL | 364 | Transborder Mexican Literature Before 1917 | Offers a historical panoramic view of the political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. May be taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L | Prerequisite(s): minimum 45 hours |
| TCL | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | Credit is allowed for only FMS 370 or TCL 370 |
| TCL | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TCL | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| TCL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 410 | Race, Medicine, and the Body | Explores how body and embodiment and race and ethnicity are constructed within and by biomedical sciences and technology development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L | Prerequisite(s): ENG 101, 105 or 107 with C or better; minimum 45 hours |
| TCL | 422 | U.S.-Mexico Border Health | Focuses on identifying health issues affecting Latino/Mexican families in the U.S.-Mexico borderlands using basic epidemiological techniques to analyze regional data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: TCL 321 with C or better |
| TCL | 424 | Theory and Practice of Community Development and Health | Foundations of methodology of community mapping and establishment of community diagnosis, media literacy and advocacy applications for community-based public health. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: TCL 321 with C or better |
| TCL | 443 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | |
| TCL | 444 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| TCL | 445 | Transborder Latin American Short Story | Studies the modern Latin American short story, with primary focus on the development of its literary and cultural tradition. Taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L or HU | Prerequisite(s): SPA 202 (or SPA 204); minimum 45 hours |
| TCL | 446 | Comparative Bilingual Latina/o Poetics | Comparative study of contemporary bilingual Latina/o poetry. Focuses on two specific U.S. ethnic minority groups--Mexican- (or Chicanos) and Puerto Rican-Americans (or nuyoricans)--who have long and strong literary traditions of bilingual poetry. The significant feature of both bodies of poetry is the interactive mixture of their base languages: Spanish and English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only TCL 446 or 598 (Comparative Bilingual Latina/o Poetics) |
| TCL | 447 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| TCL | 448 | Teaching Chicana and Chicano Studies in the Schools | Approaches/techniques for infusion of transborder studies content into elementary and secondary curriculum; designed for teachers who work with Mexican and Latino origin students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): minimum 45 hours |
| TCL | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| TCL | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS or TCL 465 |
| TCL | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only FMS or TCL 466 |
| TCL | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |
| TCL | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | |
| TCL | 485 | Chicana and Latina Writers | Critical reading of Mexican American women authors; emphasis on contemporary (post-1970) poetry, novels, short stories, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | |
| TCL | 488 | Border Global Narratives | Studies four general and different border areas through literature. Through literary-cultural texts, looks into peoples' experiences of migration to and from the homelands of Mexico, Haiti, the Dominican Republic, Cuba, and the Puerto Rican isle to the U.S. These experiences are never uni-directional but are characterized by constant back-and-forth movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Credit is allowed for only TCL 488 or 598 (Border Global Narratives) |
| TCL | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 credit hours; Credit is allowed for only TCL or WST 490 |
| TCL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| TCL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TCL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |

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| TCL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-7 | | Prerequisite(s): Transborder Chicana/o and Latina/o Studies (Media and Expressive Culture or Transborder Community Development and Health or U.S. and Mexican Regional Immigration Policy and Economy) major, minimum 56 hours |
| TCL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| TDM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 205 | Introduction to Travel and Tourism | Examines the components of the travel and tourism industry at the state, national, and global levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| TDM | 225 | Introduction to Resort and Hotel Management | Introduces local, national and international lodging and food service industries. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| TDM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| TDM | 345 | Meeting and Convention Planning | Basic aspects and skills in planning meetings and conventions. Industry and market overview of certified meeting planners. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| TDM | 372 | Tourism Planning | Applies economic and regional development concepts and theories to destination product development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Pre-requisites: Tourism Development & Mgmt or Recreation (Tourism) students; Minimum 2.50 gpa; Minimum 45 hours; TDM 205 or RTM 373 with C or better; ENG 102 with C or better; MAT 142 or higher with C or better |
| TDM | 386 | Convention Sales and Management | The role of convention and visitors bureaus or resort managers, including economic impacts of markets, structure, governance, membership, and advertising. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 401 | Tourism Management | Basic principles of administration and their application in successful administrative situations. Analyzes administrative function, structure, and policies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 201 or PRM 210 or TDM 210 with C or better; CRD 301 or PRM 301 or TDM 301 or TDM 301 with C or better; PRM 303 or TDM 372 with C or better |
| TDM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| TDM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 with C or better; NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| TDM | 415 | Tourism Transportation Systems | Examines the role of various modes of transportation in domestic and international tourism development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 448 | Heritage and Cultural Tourism | Provides a solid conceptual understanding of the issues, problems, and management implications associated with heritage and cultural tourism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 with C or better; Credit is allowed for only TDM 448 or CRD 598 Heritage and Cultural Tourism) |

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| TDM | 458 | International Tourism | Global examination of international tourism and its significance as a vehicle for social and economic development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| TDM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| TDM | 480 | Sustainable Tourism | Tourism has a multitude of impacts, both positive and negative, on people's lives and on the environment. Critically analyzes the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 120 or TDM 205 or 60 minimum hours |
| TDM | 481 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Defines sustainable development, explains the importance of sustainable food systems, recognizes the relationship between local food systems and global food challenges. Connects the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; defines leakage in reference to tourism and food. Creates and applies sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Junior standing; Minimum 60 hours |
| TDM | 482 | Sustainable Revenue Management | Introduces the fundamental economic principles that underlie revenue management and the practical application of new analytical technological services in the hotel and resort industry. Uses experienced revenue managers from local resorts and hotels as regular guest speakers and IdeaS system (a revenue management analytics subsidiary of SAS). | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: MAT 142 or higher; Minimum 72 hours |
| TDM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |
| TDM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; 72 minimum hours; 2.50 GPA or higher; Non SCRD majors |
| TDM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TDM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| TDM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| TDM | 520 | Sustainable Thinking in Tourism | First in a series of two courses introducing students to the basic concepts of sustainability and their application and implications for tourism. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 521 | Sustainable Thinking in Tourism II | Second in a series of two courses focusing on how to measure, assess, and plan for sustainability in the tourism industry. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: TDM 520 with C or better |
| TDM | 530 | Sustainable Tourism Destination Planning and Management I | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 531 | Sustainable Tourism Destination Planning and Management II | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): TDM 530 |

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| TDM | 540 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Students learn to define sustainable development; explain the importance of sustainable food systems; recognize the relationship between local food systems and global food challenges; connect the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; define leakage in reference to tourism and food; and create and apply sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 550 | Managing the Sustainable Tourism Business | Through case study analysis, students learn how sustainability impacts business operations, how successful sustainable businesses identify and assess alternative resource management techniques, and evaluate operational models for embedding sustainability practices into their business models. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) TDM 570; Credit is allowed for only TDM 550 or CRD 598 (Managing the Sustainable Tourism Business) |
| TDM | 561 | Best Practices Workshop Preparation | First in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A destination or business is identified to be used as a case study. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre/co-requisite: TDM 521 with C or better |
| TDM | 562 | Best Practices Workshop Presentation | Second in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A presentation of a best practices case study is conducted for the class. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: TDM 561 with C or better |
| TDM | 570 | Sustainable Tourism | Critically examines the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 101 | The Teachers College Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges, and opportunities of their university. Mary Lou Fulton Teachers College sections relate specifically to future educators. Covers several core college success topics. | N | SEM | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Mary Lou Fulton Teachers College Freshmen student |
| TEL | 111 | Exploration of Education | Education as an instrument in the development of the individual and society and its significance as an American Institution. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 200 | Social Embeddedness of Educational Endeavors | Serves as a pathway toward self discovery and professional identity. Course readings, reflections and self assessments help students develop personal and professional goals and goal-setting strategies. Course assignments provide students with a greater level of understanding regarding the reciprocal influences among community and culture and the student's life experiences. Students have an opportunity to clearly define themselves and share topics they are passionate about, as well as locate how they might fit into and contribute to their community. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| TEL | 212 | Understanding the Culturally Diverse Child | Surveys cultural and linguistic diversity in American education, including education equity, pluralism, learning styles, and roles of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Credit is allowed for only MCE 230 or TEL 212 |
| TEL | 215 | Introduction to Child and Adolescent Development | Emphasizes the cognitive, social-emotional, and physical domains of child and adolescent development. From a knowledge base of theory, research, and current issues, students apply learning to developmentally appropriate principles and practices that guide relationships and learning experiences for all children. Uses available technologies; emphasizes the complex ecosystem of culture, ethnicity, family, and school. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 300 | Community, Family, and Education | Addresses education in a community and family context. Analyzes education and identifies education-focused community challenges in a broad variety of settings and across multiple times and places. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200 |
| TEL | 311 | Instruction and Management in the Inclusive Classroom | Planning and delivering instruction, organizing and managing classrooms, and making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 313 | Educational Technology in the K-12 Curriculum | Focuses on using technology in an education setting and addresses the integration of technology in curricular areas for all students. Students receive a broad-based introduction to using and integrating technology into many different educational settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 56 hours |

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| TEL | 314 | Classroom Assessment | Assessment and evaluation of student learning; emphasizes integration and adaptation of curriculum, instruction, and evaluation of all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 315 | Child and Adolescent Development | Physical, cognitive, social, and emotional development during childhood and adolescence; developmentally appropriate principles and practices to facilitate development for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L or SB | |
| TEL | 316 | Teaching, Imagination, and Creativity | Engages students in critical thinking and the complex terrain of aesthetic theory and intellectual, academic work and teaching practice. Students apply aesthetic consciousness teaching by teachers developing imagination, creativity, and intuition as tools to use every day in their classrooms. Emphasis on how teachers can integrate the arts into the curriculum, use the arts to support academic content, and develop aesthetic consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. The arts will also be studied as multi-cultural and socio-cultural phenomena, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society. consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. Also studies the arts as multicultural and sociocultural phenomena in support of these ends, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Education majors; Minimum junior standing |
| TEL | 320 | Introduction to Gifted Education | Overview of a variety of issues related to gifted students from preschool through high school. Provides background in order to create an optimal experience for students, parents and teachers when working with gifted students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 400 | Innovation in Educational Endeavors | Pursues innovative solutions to social problems with the courage and ability to impact change in individuals, communities and organizations. Reviews community problems, challenges or areas of improvement; learns underlying principles of social enterprise; and develops innovative methods that empower individuals and support educational initiatives. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200, 300 |
| TEL | 404 | Current Issues in Education and Policy Reform in the United States | Specialized topics related to current issues in education with a focus on education reform efforts from the late 20th century into the 21st century. Explores current reform efforts in education as part of the larger public policy agenda in the United States, analyzing how external influences shape present education systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-reqs for TEL 404 |
| TEL | 405 | History of Education and Policy Reform in the United States | Specialized topics in education history with a focus on education reform efforts from pre-Revolutionary War time to the end of the 20th century. Explores the past reform efforts in education as part of what was happening historically in the United States, analyzing how those efforts have shaped the present education systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TEL 405 or TEL 494 (History of Education & Policy Reform in the US) |
| TEL | 410 | Leadership and Advocacy in Educational Endeavors | Educators who take an active stance through advocacy and leadership are well-equipped to create societal change. Students learn about styles of leadership that are fitting for this need, study advocacy techniques, then position themselves as advocates and leaders as they create a plan, with goals, to address an identified community problem, challenge or area of improvement. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200; 300; 400 |
| TEL | 420 | Curriculum Strategies for Gifted Learners | Overview of a variety of ways in which to create and adapt curriculum for gifted students from preschool through high school. Provides a broad range of resources for classroom teachers to use in order to help gifted students work to their full potential in a heterogeneously grouped classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 430 | Learning Outside of School | Studies and methods from a variety of nonschool environments for learning and development. Teaches knowledge and skills such as methods of identifying and evaluating free-choice learning that occurs through museum going, hobbies, family learning, media, community programs, sports, public health campaigns, and more. Covers career opportunities for educators in key creative environments besides classrooms. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 430 or 494 (Learning Outside of School) |
| TEL | 431 | Learning in Workplaces | School isn't the only place where people learn! Once you get a job, most of what you learn will occur as you do your job, and that kind of learning is crucial to the development of competence and expertise. Surprisingly, seventy to eighty percent of this important learning takes place outside of formal training. Studying learning in workplaces illuminates how learning happens universally, and helps teachers and trainers design effective educational programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 431 or 494 (Learning in Workplaces) |
| TEL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |

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| TEL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| TEL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| TEL | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only COE 501 or ECD 503 or SPE 501 or TEL 501 |
| TEL | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 607 | Critical Social Theory and Education | Seminar exploring education through the lens of critical social theory originating in the Frankfurt School. Marxian theory is updated to confront current situations through the ideas of alienation, base and superstructure, hegemony, ideology, and culture theory as well as a vision of human consciousness. Includes Pierre Bourdieu's theory of habitus, social or cultural capital, and field. Studies various critical education scholars as applications of critical social theory. Examines critiques of critical theory. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only DCI 691 (Critical Social Theory) or TEL 607 |
| TEL | 683 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| TEL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | GRD | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TEL | 706 | Introduction to Doctoral Studies | Prepares doctoral students for success, focusing on balance and identity, communities of practice, leadership and innovation, action research, and organization systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Leadership and Innovation EdD major; Credit is allowed for only TEL 598 (Introduction to Doctoral Studies) or 706 |
| TEL | 711 | Strategies for Inquiry | Develops knowledge and skills for research and program evaluation that foster innovation in education that leads to improved student learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 712 | Mixed Methods of Inquiry | Methods for combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 713 | Applied Mixed Methods of Inquiry | Data collection, analysis, interpretation in studies combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 795 | Continuing Registration | | N | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 100 | Seminar in Entrepreneurship | Exposes students to careers in entrepreneurship by inviting diverse entrepreneurs to discuss their businesses and backgrounds and share their stories on starting and growing their ventures. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Credit is allowed for only TEM 100, TEM 194 (Entrepreneurship) or OMT 191 (Entrepreneurship) |
| TEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 200 | My Technology Venture | Introduces the concept of entrepreneurship through venture practice and self-reflection to help students understand their potential roles in a technology-driven marketplace. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110; Credit is allowed for only TEM 200, 294 (My Technology Venture) or TMC 294 (My Technology Venture) |
| TEM | 230 | Creativity and Business Innovation | Introduces concepts, models and techniques of creativity and innovation. Exposes processes related to developing creative skills and habits with an emphasis on problem solving and design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Minimum sophomore standing. Credit is allowed for only TEM 230, TEM 394 (Technology Entrepreneurship) or TMC 394 (Technology Entrepreneurship) |
| TEM | 250 | Design Methodology | Outlines product design method and provides opportunity to apply it to a design project including identifying needs, setting target specifications, generating and selecting concepts, prototyping and testing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 250 or OMT 294 (Design Methodology) |
| TEM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 311 | Opportunity Analysis | The key to making sound business decisions involves the careful analysis of the situation, intelligent use of research, and successful practice. Entails the research and implementation of strategy to determine consumer expectations utilizing the skills especially important in today's competitive and turbulent market. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TEM 200 (or TMC 110) |
| TEM | 330 | Systems Innovation | Systems thinking course that investigates how innovators can incorporate the knowledge of complex systems into the processes of technology development, product/service innovation and venture development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 330 or TEM 394 (System Innovation) |
| TEM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |

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| TEM | 400 | Technology Entrepreneurship | Introduces opportunities and challenges that accompany starting and operating an entrepreneurial venture by exploring the fundamentals and principles of entrepreneurship suitable for undergraduate business and technology students. Provides real-world, hands-on learning on what it's like to successfully transfer knowledge into products and processes that benefit society. Engages students with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 400, TEM 394 (Technology Entrepreneurship) or OMT 494 (Tech Entrepreneurship) |
| TEM | 420 | Statistics for Industry | Covers topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis. Provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems. Where possible, explores problems from the students' disciplines to insure that the principles of statistics and probability are studied in the context of the students' chosen field. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: MAT 117 or any MA General Studies course |
| TEM | 431 | Innovation Management | Focuses on execution challenges that innovation initiatives face, including: (a) Resources: Where do the resources for innovation initiatives come from? (b) Organization: How should innovation initiatives be organized? (c) Planning: How should plans for innovation initiatives be written and through what kind of process should they be revised? Explores the processes of innovation management for various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 431 or TEM 494 (Innovation Management) |
| TEM | 450 | Design for the Developing World | Learn the product design process; improve the lives of poor residents in communities at the base of the economic pyramid who earn less than \$2/day. Help improve health, energy and clean water issues among others by joining with GlobalResolve, an ASU program in the College of Technology and Innovation whose goal is to help reduce poverty through technological innovation and entrepreneurship. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Junior, Senior or Graduate standing; Credit is allowed for only TEM 450 or TEM 494 (Design for the Developing World) |
| TEM | 455 | Global Impact Entrepreneurship | Increases awareness and understanding of the complex nature of global poverty. Students think comprehensively about sustainable ways to address by focusing on business ventures and product design, which take advantage of local resources, networks and institutions. Students design and refine technologies and services that address the needs of communities in the developing world. Examines piloted technological innovations by ASU students in the west African nation of Ghana, India, and Latin American countries such as Mexico and Peru. Analyzes technological initiatives that have been piloted in Ghana and Peru, and attempts to create sustainable business ventures for them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Junior, Senior or Graduate (degree or nondegree) student; Credit is allowed for only TEM 455 or OMT 494 (Global Impact Entrepreneurship) |
| TEM | 460 | Lean Six Sigma Green Belt Certification | Six Sigma and Lean are fast becoming required knowledge for professionals involved in helping their companies streamline productivity and improve performance. Provides a focused and measurable management discipline, structured to reduce product and service failure rates to near perfection. Explores how Six Sigma and Lean strategies and tactics fit into a larger management systems and how to apply these techniques to solve and prevent critical business process problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 460 or OMT 494 (Lean Six Sigma Green Belt Certification) |
| TEM | 480 | Focus Area Project | Student research project that synthesizes knowledge across the core and the student's selected focus area. Examines a practical challenge that demonstrates technical competence related to technological entrepreneurship and management. Enhances the student's ability to focus on a topic, conduct research and present findings. | N | LEC | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 330 (or TEM 394 or TMC 394 System Innovation) or Junior standing |
| TEM | 481 | Consulting Project | Students learn about technology entrepreneurship through consulting with leaders and owners of businesses, not-for-profit organizations and government agencies. Requires both out-of-class consulting projects and in-class instructional sessions focused on technology entrepreneurship and business strategy, including financing, promoting, leading and growing the venture and consulting skills. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |

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| TEM | 482 | Startup Workshop | Students launch their own technology-based ventures with collaboration and mentorship from colleagues and faculty. Explores the fundamentals and principles of entrepreneurship suitable for undergraduate technology entrepreneurship. Provides real-world, hands-on learning on what it's to successfully transfer knowledge into products, processes and services that benefit society. Engages with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| TEM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| TEM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | | Prerequisite(s): Barrett Honors student |
| TEM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 505 | Lean Process Improvement | Develops an understanding of individual and group decisions and responsibilities for process design and improvement in work settings. Covers common problems and success stories and qualitative and quantitative techniques to measure progress toward organizational goals for a variety of industrial business situations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 530 | Statistics Bootcamp for Industry | Provides foundational coverage of topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis, appropriate for first-year graduate students. Additionally, provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems from technology, entrepreneurship, aviation and psychology. Where possible, explores problems from the student's discipline to insure that the principles of statistics and probability are studied in the context of the student's chosen field. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only TEM 530 or 598 (Statistics Bootcamp for Industry) |
| TEM | 531 | Disruptive Innovation and Technological Evolution | Focuses on the processes of innovation management of various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams, with an emphasis on disruptive innovation and the evolution and forecasting of technology. Provides a survey of innovation management concepts and various technological forecasting and prediction approaches, both mathematical and nonmathematical, in conjunction with a study of the evolution of selected technologies and the management problems associated with emerging technologies. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 532 | Advanced Analysis of Systems | Introductory course in systems analysis and modeling. Develops basic competence in formulating and solving models of systems to aid decision making. Topics include: introduction to systems and systems modeling; a simple what-if analysis; overview and review of linear algebra and matrices; problem formulation and model development in optimization; linear programming (LP), economic interpretation and sensitivity analysis; introduction to integer programming (IP); special linear programs; project schedule network development and computations; overview of heuristic algorithms. Uses selected software in examples, short problems and in a project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |

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| TGM | 101 | Principles of Global Management | Provides the basic concepts of management with particular emphasis on the functions of management in a global environment. Examines the antecedents of globalization; the role of global environments in shaping organization structure, strategy and processes, as well as the basic principles of managing in complex cross-cultural settings. Emphasizes global institutional arrangements and macroeconomic issues. Serves as an introductory course that provides a quick snapshot of key issues facing global corporations today with each of the major themes explored more fully in the set of advanced courses that follow. Applies global business concepts in understanding global political economics, legal systems and socio-cultural environments. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | |
| TGM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): Maximum 25 hours |
| TGM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 200 | Principles of Accounting for Global Organizations | Focuses on financial and managerial accounting and examines how outsiders evaluate businesses, nonprofits and governmental operations and how economic events are reflected in a firm's financial statements, including balance sheets and cash flow statements. Examines key accounting methods that impact a company's financial statements and how they are used by shareholders, creditors, employees and customers to make credit decisions and/or value a firm's equity securities. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 204 | Principles of Marketing for Global Organizations | Explores the ways in which global marketing strategies reflect a deep understanding of markets and create valuable offerings for customers globally. Broadly speaking, marketing strategy making is comprised of segmentation, targeting and positioning. Segmentation is the process by which we segregate a relatively heterogeneous mass market into relatively homogeneous market segments. Targeting is the process by which we analyze opportunities and identify those customers where our business has the greatest prospects for success. Positioning is the process of assembling the "total offering" (product, service, distribution and price) and communicating the benefits of this "total offering" to the members of our target market. Challenges students to think critically about global competition. As such, rote learning of terms and concepts is not sufficient to prepare students to manage a business in global markets. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 268 | Intercultural Communication for Global Management | In a dynamic and interactive format, this course presents a framework of models and skills for building communication performance in competitive global business settings. Assists in implementing strategies for mastering interpersonal encounters, including conflict resolution, in multicultural environments. Examines theories of communication (the basic concepts, principles and skills vital for understanding and improving communication across racial, ethnic and cultural differences). Places students in experiential situations in order to develop valuable global management skills. Using cases, self-assessment questionnaires, multicultural team exercises and simulations, equips the global manager with the ability to solve problems and take advantage of opportunities in a multicultural world. Explores in depth intercultural theories from the TGM three regional areas—China, Latin America and the Middle East. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 300 | Principles of Finance for Global Organizations | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management; and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 353 | Regional Management Environment | Provides future global managers with the analytical tools and frameworks for understanding the political, social, cultural and economic contexts within which business activities take place in various countries and regions throughout the world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 400 | Advanced Topics in Global Management | Focuses on advanced topics in global management designed to synthesize knowledge acquired from global business, language and cultural coursework. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management student; ENG 208 or MND 202 or MSA 202 or SPA 202 with C or better |

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| TGM | 468 | States and Markets | Global managers operate in an international economy that presents tremendous opportunities as well as risks. Globalization has dramatically expanded opportunities for international trade, investment and economic development. At the same time, global managers have to deal with the prospect of trade wars, international financial crises and intensified competition over markets and resources. In addition, international organizations such as the International Monetary Fund, World Trade Organization and World Bank Group have a direct impact on international business operations. Develops analytical tools for understanding the rapidly changing and dynamic global political. With these tools, managers are better prepared to anticipate the risks and take advantage of opportunities in the global economy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 489 | Multinational Organizational Leadership | Explores multinational organizational management strategies, organizational practices/systems, and related managerial skills which are an essential part of global competitiveness. Develops skills to understand the application of analytical tools and frameworks, executes complex strategy, and builds and leads competitive teams and people. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | | |
| TGM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | L | |
| TGM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-7 | | |
| TGM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | |
| TGM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 501 | Global Accounting | Focuses on two aspects of accounting: financial and managerial accounting. Financial accounting is about how outsiders view and evaluate an organization such as a business, a not-for-profit entity or a governmental operation. It focuses on how economic events are reflected in a firm's financial statements including a balance sheet, an income statement and a statement of cash flows. It also focuses on how financial statement information is used by various stakeholders such as shareholders, creditors, employees and customers in making decisions with regard to the firm, including credit decisions and/or valuing a firm's equity securities. Analysis and equity management accounting involves providing information, both financial and non-financial, to management and employees to aid in planning, organizing activities, and monitoring and controlling business performance. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 502 | Financial Management for Global Value Creation | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management; and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation, and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 503 | Global Marketing | Provides a managerial orientation to the topic of global marketing in today's complex, rapidly changing international business environment. A key focus is developing competitive advantage by creating customer value. Course participants gain a fundamental understanding of marketing strategy and marketing analysis (i.e., customer, competitor and company analysis) as well as an appreciation of the basic strategic issues involved in market segmentation, market targeting and market positioning in the international arena. Also examines the major tactics/tools used by global marketers to facilitate the management of their international marketing plans (i.e., product development, pricing strategies, marketing communications, distribution management). Emphasizes developing skills for entering new markets and sustaining or growing current markets. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 504 | Managing Organizations from a Global Perspective | Covers two key aspects of successfully managing an organization in a global environment. The first component covers the strategic direction of the organization, and the second component discusses how to harness the power of people in the organization to build teams and lead people to execute the strategy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 505 | States and Markets in a Global Economy | Global managers operate in an international economy that presents tremendous opportunities as well as risks. Globalization has dramatically expanded opportunities for international trade, investment and economic development. At the same time, global managers have to deal with the prospect of trade wars, international financial crises and intensified competition over markets and resources. In addition, international organizations such as the International Monetary Fund, World Trade Organization and World Bank Group have a direct impact on international business operations. Develops analytical tools for understanding the rapidly changing and dynamic global political. With these tools, managers are better prepared to anticipate the risks and take advantage of the opportunities they will encounter in the global economy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 506 | Communicating and Negotiating Across Cultures | This dynamic and interactive course provides managers with an effective framework for achieving their goals in global management settings. Assists students to prepare for and execute time-tested strategies for achieving communication competence with persons from different cultures. Also covers negotiating in the global context. Not only examines theories of culture and communications, but also places students in an experiential situation to gain valuable skills for overcoming obstacles in global management environments. Through use of cases, multicultural team exercises, student negotiation exercises and simulations, equips the global manager with tools to solve problems and take advantage of opportunities in a multicultural world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 507 | Global Organizational Consulting: Basics | Consulting course provides an overview of the field of consulting and the role of the management consultant. Familiarizes students with the tools and techniques used during a consulting engagement, including project entry, problem definition, intervention planning, data collection, problem solving, alternative generation, feedback, project exit, client relations skills and project management. Requires students to work in project teams to solve business problems in organizations through the application and expansion of technical skills acquired in other classes. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 508 | Regional Business Environment I: Emerging Markets | As an extension of states and markets in a global economy, provides an analysis of contextual factors that influence dynamic business environments by employing frameworks that integrate political, economic, geographic, and sociocultural factors in a specific regional area. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |
| TGM | 509 | Regional Business Environment II: Developed Economies | Provides future global managers with the analytical tools and frameworks for understanding the European business environment. Also provides a broad understanding of the region in order to be successful therein. Deals with the political, social and economic context within which business activities take place in Europe. In order to succeed as managers in the environment, requires knowledge of political, social, cultural, economic, business and regional economic factors, both across the European landscape and within individual countries. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 508 |

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| TGM | 511 | Global Financial Accounting | Accrual accounting concepts, teaching students how to prepare and understand the content of traditional financial statements. Topics include the recognition and measurement of accounting events; preparation and analysis of income statements, balance sheets and statements of cash flows; and the measurement of revenue, expenses, assets, liabilities and stockholders' equity, including both U.S. and international principles. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 512 | Managerial Accounting and Decision Making in a Global Environment | Covers the development and use of managerial accounting information, including both financial and nonfinancial performance measures, in making long- and short-run decisions. Topics include cost-profit-volume analysis, cost behavior, relevant costs, job-order and processes costing, activity-based cost management and the analysis of customer profitability. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 501 or 511 |
| TGM | 521 | Managing for Global Value Creation | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation, and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 522 | Global Financial Decisions | Covers modern practices of financial decision-making and management in a market-oriented multinational framework. Topics addressed include capital structure decisions, risk management involving financial derivatives and currency hedging, cross-border investment decisions, subsidiary management, and cross-border merger and acquisitions. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 521 |
| TGM | 528 | Business Intelligence | Examines the role that business intelligence--the systematic collection, synthesis and analysis of information on the external operating environment--should play in strengthening corporate strategies and decision making. Through lectures and client-sponsored competitive assessment projects, the course has two goals: to help students understand this management tool and to train them to be able to utilize it for competitive advantage. Also addresses the related issues of corporate/industrial espionage and information security. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 504 or 540; TGM 541 |
| TGM | 530 | Big Data in the Age of the Global Economy | Creating a sustainable IT-dependent competitive advantage is a major goal for forward-thinking multinational organizations. Understands how multinational organizations make strategic use of Big Data to gain a competitive advantage in the global economy. Covers the important technological aspects of big data from a managerial viewpoint. Delves into the understanding of global data and how this data must be standardized to account for differences in collection methods, legal constraints and cultural interpretation to create a reliable platform for evaluation. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 531 | Multinational Value Chain | Exposes students to the strategies and challenges associated with moving goods, services, information and associated payments across complex, globally dispersed value chains to end customers. Topics include value-chain structures, supplier partnerships, cross-cultural issues, technology, data networks, global logistics, risk management and value-chain mapping. A field project provides students with an opportunity to work in teams applying the course concepts to increase customer value in a real value chain. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 532 | Leading Global Projects | Provides frameworks and approaches for planning and implementing complex projects and initiatives such as new product launches, IT implementations, changes in processes and new forms of partnering. Places specific emphases on tools and approaches that can be used to enhance clarity of the deliverables and manage stakeholders' expectations and engagement given limited resources and competing priorities among internal and external stakeholders. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 540 | Managing People from a Global Perspective | Explores the mix of organizational practices and people that can be the basis of sustainable competitive advantage in the contemporary global business environment. Topics covered include cross-cultural issues in managing people, traditional and emerging models of organizations, organizational culture, leadership, employee skills and motivation, reward systems and change management. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 541 | Competitive Strategy from a Global Perspective | Focuses on choices that impact the performance of the entire organization. Examines central questions: Why are some industries and firms more profitable than others? How do firms create competitive advantage? How does the choice of strategy drive organizational performance? How do firms manage scarce resources in the pursuit of strategic objectives? How do firms create unique and sustainable industry positions? | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 546 | Regional Industrial Analysis | Builds on concepts introduced in competitive strategy, global strategy and regional business environment. Focuses on the analysis of the strategies adopted by competing players and their impact on the global strategies pursued by the parent organization in the context of regional industry dynamics. Covers a spectrum of topics ranging from industry cluster formation, country-specific advantage, industry versus industry ecosystem analysis, the government's role in industry and regional development including national innovation systems, demand and supply chains in regions, and emerging market challenges. Applies multiple decision-making tools and frameworks to understand the Information and Communications Technology (ICT) industry in Asia Pacific--the fastest growing region in the world. Tools and frameworks learned in this course are applicable to other regions and other industries. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |
| TGM | 547 | Leading Change and Transformation in a Global Environment | Increases understanding of the nature of organizational change (through conceptual frameworks, readings and discussions). Specifies skills needed for managing change. Enhances sensitivity to the contribution and consequences of the human element as related to change. Helps student's own capacity to "thrive on change." | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 540 |
| TGM | 548 | Global Strategy | Focuses on how global firms create value. Covers topics ranging from country-specific competitive advantage and the notion of distance to alternative global strategy archetypes and sources of competitive advantage for emerging market multinationals. The approach applies multiple decision-making tools and frameworks to untangle the complexities of managing in a global corporation. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 541 |
| TGM | 549 | Global Leadership | Explores the concept of effective leadership within and across a variety of organizations and global contexts. Definitions of "leadership" and strategies for becoming an accomplished leader abound. Rather than attempt to narrowly focus our attention on definitions, leadership styles, and supposedly "definitive" theories of leadership, focuses on the demands of and competencies associated with excellent leadership. Most importantly, examines how leaders sense the need for and then manage organizational change. Given the increasingly complex world we live in and the ongoing and rapid rate of change, change management has become one of the most critical of leadership skills. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 504 or 540 |
| TGM | 551 | Global Marketing Strategy | Covers the major concepts involved in creating and sustaining customer value, analyzing the firm's macro environment, choosing whether or not to enter a foreign market, how to evaluate different foreign markets, the best methods for entering different markets, the market research design process, understanding consumer and B2B customer behavior, and ethical issues encountered in global marketing. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 552 | Global Marketing Management | Covers the functional aspects of marketing including decisions relating to segmentation, targeting, branding, product development, pricing, distribution and advertising/promotion. Students integrate their knowledge of these topics through the creation of an international marketing plan based on a product or service and in a country approved by the instructor. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 579 | Communicating in a Global Context | In a dynamic and interactive format, presents a framework of models and skills for building communication performance in competitive global business settings. Assists in implementing strategies for mastering interpersonal encounters, including conflict resolution, in multicultural environments. Not only examines theories of communication, but places students in experiential situations in which they develop valuable global management skills. Using cases, self-assessment questionnaires, multicultural team exercises and simulations, equips the global manager with the ability to solve problems and take advantage of opportunities in a multicultural world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 581 | Negotiating in a Global Context | Provide students with knowledge, skills, insights and experience necessary to be a competent negotiator. Covers theories of cross-cultural negotiation and how these impact business interactions. Students gain insight into personal and cultural underpinnings that influences cognitive, affective and negotiation behavioral processes. Expands skills in achieving communication and negotiating competence through the understanding and practice of increased appropriateness, flexibility and adaptability. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 585 | Corporate Social Responsibility in a Global Context | Provides knowledge, skills, insights and experience necessary to be a competent negotiator. Covers theories of cross-cultural negotiation and how these impact business interactions. Students gain insight into personal and cultural underpinnings that influences cognitive, affective and negotiation behavioral processes. Expands skills in achieving communication and negotiating competence through the understanding and practice of increased appropriateness, flexibility and adaptability. Corporate Social Responsibility (CSR) has become essential for corporations seeking to succeed in an intensely competitive global economy. Provides an in-depth understanding of what CSR is, how to apply it effectively in an international context and how to manage it well. Using a case-based approach, focuses on actual experiences of corporations that have used CSR strategies successfully--and unsuccessfully--to draw practical lessons for international managers. Incorporates several guest lectures from executives who share their firsthand experiences with CSR in various regions of the world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |
| TGM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic or writing a literature review of a topic. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 591 | Seminar | A small class emphasizing discussion, presentations by students and written research papers. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded and no grade is assigned. | Y | RSC | Y | Z3 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1 | | |
| TGM | 596 | Thunderbird Experiential Practicum | Capstone course offering students an opportunity to apply the full range of professional skills they have acquired during graduate business and management studies. Consists of participation in a consulting project for a client system in an emerging market country, including Central America, Latin America, the Middle East, Africa, central and eastern Europe, and the whole of Asia apart from Hong Kong, Japan, Singapore, Australia and New Zealand. Serves all sectors: public/governmental, private and NGO/nonprofit. | N | PRA | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 501 or 512; TGM 502 or 522; TGM 503 or 552; TGM 505 or POS 586; TGM 506 or 579; TGM 508; TGM 581, OR Master of Arts in Global Affairs and Management major: TGM 507 |
| TGM | 597 | Thunderbird Integrative Experience | Provides a capstone experience that integrates content from several business areas including strategy, finance, cross-cultural communication, supply chains, leadership, operations and accounting. May take the form of an integrative business computer simulation or a seminar drawing on faculty from a variety of business areas to highlight key issues in those areas. | N | LEL | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505; TGM 512; TGM 522; TGM 530; TGM 541; TGM 552; Corequisite(s): TGM 548 |
| TGM | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| THA | 101 | Elementary Thai I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose readings in Thai script. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| THA | 102 | Elementary Thai II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites:THA 101 with a grade of C or better |
| THA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Prerequisite: Freshman with minimum 25 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|----------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------|
| THA | 201 | Intermediate Thai I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 102 with C or better |
| THA | 202 | Intermediate Thai II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 201 with C or better |
| THE | 100 | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): non-Theatre and non-Film students only |
| THE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 320 | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: THF 220 with C or better; THE 220 with C or better |
| THE | 321 | History of the Theatre II | Traces major developments in theatre production from the 17th century to modern times. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Pre-requisites: THE 220 (or THF 220) with C or better; THE 320 with C or better |
| THE | 322 | Theatre History and Culture | Critically examines major developments in theatre history, historiography, and dramatic literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: Must NOT be a Theatre student |
| THE | 325 | Play Reading for Educational Theatre | Assigned independent readings in plays for secondary school play production. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisites: Theatre student |
| THE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 403 | Independent Film | Examines the independent film movement from the French New Wave to contemporary independent filmmakers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisites: ENG 102, 105 or 108 with C or better |
| THE | 404 | World Cinema | Films and filmmakers from Europe, Asia, Australia, the Far East, South America, and the Caribbean. Emphasizes cultural content and filmmaking philosophies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | G | Prerequisites: ENG 102, 105 or 108 with C or better |
| THE | 405 | Film: Great Performers and Directors | Examines processes and influences of one or more great film performers and/or directors. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisites: ENG102, 105 or 108 with C or better |
| THE | 406 | American Multicultural Film | Examines Native, African, Asian, and Latino and Latino American films and film artists in cinema history and production. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG102, 105 or 108 with C or better |
| THE | 421 | Shakespeare: Stage and Film | Examines Shakespeare's plays as written texts, stage performances, and film productions. Focuses on play reading, performance analysis, and film critique. Online course. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better |
| THE | 422 | Latina and Latino Theatre and Film | Explores issues of cultural identity through critical analysis of theatre and film by Latina and Latino artists in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better OR Theatre Masters students |
| THE | 423 | African American Theatre | Readings, discussion, video of the history and dramatic literature of African American playwrights and theatre companies in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisites: ENG 102, 105 or 108 with C or better, or Masters student |
| THE | 424 | Trends in Theatre for Youth | Surveys the history, literature, and contemporary practices in theatre for youth. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THE | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| THE | 426 | Pre-Columbian Theatre of the Americas | Selected studies in pre-Columbian theatre forms and texts of the Aztecs, Mayans, Caribbean islands, and North American Indians. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG102, 105 or 108 with C or better, or Masters Theatre student |
| THE | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| THE | 430 | History of Fashion | Fashion is rarely set but rather evolves with eras of upheaval between one generation and the next. Clothes express the personality and rank of the individual creating an instantaneous and lasting impression. Introduces over 400 years of Western fashion history drawing parallels between the fashion and the period in which it existed. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Sophomore standing or higher; Minimum GPA 2.50 |
| THE | 440 | Experimental Theatre and Performance | Explores 20th-century modernist theatrical forms and movements and development of alternative strategies for analyzing contemporary theatre and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): Theatre undergraduate student; THF 220 (THE 220) with C or better; THE 320 with C or better |
| THE | 480 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th- through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum junior standing; Credit is allowed for only THE 480 or 581 |
| THE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |

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| THE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |
| THE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): graduate School of Film, Dance and Theatre major |
| THE | 504 | Studies in Dramatic Theory and Criticism | Surveys dramatic theory, criticism, and aesthetics as they relate to contemporary performance. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 505 | Critical Theory and Performance | Surveys contemporary theories of culture as they apply to theatre and performance studies. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre graduate student |
| THE | 510 | Studies in Literature | Assigned individual reading program in standard sources and masterpieces in theatre literature. May be repeated for credit. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite: Must be a Theatre Education or Theatre for Youth student |
| THE | 520 | Theatre History and Literature | Surveys historiographical issues and dramatic literature related to key periods in theatre history. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 524 | Advanced Studies in Theatre for Youth | In-depth study of the history, literature, and contemporary practice of theatre for young audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre Education or Theatre for Youth student |
| THE | 525 | Advanced Studies in Theatre for Youth II | Project-oriented explorations of theory and practice of contemporary theatre for youth audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THE 524 with B or better |
| THE | 562 | Literary Management Workshop | Advanced literary management for the contemporary theatre, including trends in new play development, festivals and productions throughout the United States. Participation in Arizona Playwriting Competition. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 560 with B or better |
| THE | 581 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th- through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate (degree or non-degree) student. Credit is allowed for only THE 480 or 581 |
| THE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THE | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art Theatre student |
| THE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |

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| THE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisite: Must be a Theatre Education or Theatre for Youth student or have instructor approval. |
| THE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THE | 100 | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| THE | 320 | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisites: THF 220 with C or better, THE 220 with C or better |
| THE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | 420 | History of American Theatre | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| THE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| THE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| THE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THF | 101 | Acting Introduction | Introduces basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Must not be a Theatre student |
| THF | 125 | Orientation to Film, Dance and Theatre | Orientation to university and school resources and procedures. Academic success strategies, mentorship, goal setting. Community-building exercises. | N | REC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): BA Film (Film and Media Production or Filmmaking Practices) or BA Performance and Movement or BA Theatre (Acting or Design and Production or Theatre Exploratory) major; freshman standing |
| THF | 126 | School of Film, Dance and Theatre: First-Year Experience | Community building within the School of Film, Dance and Theatre; connections with faculty; foundations of creative process; attendance and written response to performance and media events. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Prerequisite(s): BA Film (Film and Media Production or Filmmaking Practices) or BA Performance and Movement or BA Theatre (Acting or Design and Production or Theatre Exploratory) major |
| THF | 160 | Introduction to Storytelling | Introduces the nature, structure, and operations of story, as well as the functions of narrative in societies and cultures. Several modules introduce a different mode of storytelling. Students learn to create their own stories utilizing several of the approaches introduced in the modules. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Film or BA Performance and Movement or BA Theatre major |

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| THF | 215 | Design and Composition for Theatre and Film | Introduces the aesthetic principles and practices employed by designers/artists of the stage and screen, including: basic knowledge of the elements and principles of design; conceptualization of design for theatre and film; director/designer collaboration models; methods and modes of visual communication for theatre and film (storyboards, renderings, models, etc.). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Digital Culture (Theatre) or BA The Arts (Entertainment Design) or BA The Arts (Fashion Design) major OR School of Theatre and Film major |
| THF | 220 | Principles of Dramatic Analysis | Analysis, evaluation, and interpretation of dramatic literature for theatrical production. Emphasizes the traditional canon of dramatic literature and traditional structures and forms of drama. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: School of Theatre and Film major or Theatre Exploratory major with minimum sophomore level; ENG 101, 105 or 107 with C or better; Pre- or Co-requisite: THF 126 with C or better |
| THF | 397 | Professional Development Seminar | Preparatory course for senior projects. Students research and create senior project proposals while formalizing faculty mentorships. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THF | 497 | Senior Project | Mentored practicum for culminating capstone projects. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): THF 397 with C or better; Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THP | 102 | Acting I: Fundamentals | Explores and applies basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Performance and Movement or Theatre major |
| THP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 201 | Theatre Production Crew | Participation in university mainstage theatre production backstage and board operations. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THP | 202 | Acting II: Intermediate Techniques | Rehearsal techniques and application of action to dramatic text. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 or THP 102 with B or better; THF 272, 277 with B- or better. Pre- or corequisite(s): THF 220 (THE 220) with C or better if completed |
| THP | 212 | Puppetry with Children | Construction and manipulation of puppets; practice in performance skills. Emphasizes educational and recreational uses of puppetry by and with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 213 | Introduction to Technical Theatre | Procedures of technical theatre production and demonstration. Topics include design and construction of scenery, lighting, and properties. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Pre-requisites: Theatre or Digital Culture (Theatre) student |
| THP | 214 | Introduction to Costuming | Basic principles of costume design, construction, and survey of selected historical periods including makeup styles. Costume design project and production experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 218 | Directing I: Introduction to Directing | Overview of emergence and practice of the director's craft. Explores director's role and responsibilities, play selection, conceptualizing, ground plans, blocking. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THF 220 with C or better; THP 102 with C or better |
| THP | 251 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 260 | Introduction to Playwriting | Basic skills of playwriting including exercises in monologues, scenes, and conflict and resolution, leading to completion of a one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: ENG101,105 or 107 with C or better |
| THP | 272 | Acting: Introduction to Movement | Movement vocabulary and physical training in relaxation, alignment, conditioning, and stage presence. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 277 | Acting: Introduction to Voice | Exercises and techniques to free the voice and improve quality and projection. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 301 | Theatre Production | Participation in university mainstage theatre productions (e.g., acting, construction, stage management). | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 213 or THP 214 with C or better |
| THP | 302 | Acting III: Advanced Techniques | Advanced practice in methods, skills, and research for rehearsal and performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s) with C or better: THF 101 or THP 102; THF 220 (THE 220); THP 202, 272, 277; minimum junior standing |
| THP | 307 | Acting: Research and Performance | Acting in theatre projects, productions, or collaborative performances in directing classes. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisite: THF 101 (or THP 101 or THP 102) with C or better |
| THP | 311 | Creative Drama with Youth | Theories, materials, and techniques for facilitating improvisational drama with children and youth in classroom and community settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; minimum 25 hours |
| THP | 313 | Fundamentals of Design | Art and practice of scenic, costume, and lighting design for the theatre and the media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 213 or THP 214 with C or better or Digital Culture (Theatre) major |
| THP | 317 | Stage Management | Readings in stage management and participation as a stage manager in a university theatre production. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre undergraduate student; Corequisite: THP 301 |
| THP | 318 | Directing II: Intermediate Directing | Explores approaches to staging and composition. Studio work culminates in presentation of a fully rehearsed ten-minute play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP218 with C or better; THP213 or THP214 with C or better |
| THP | 330 | Costume Design | Explores the elements of design, taking abstract ideas and formulating them into concrete forms. Encourages the student to experiment with different ideas and mediums. Emphasizes design basics, research, figure drawing, and beginning rendering techniques. Uses projects that involve complex script and character analysis to promote the student's ability to effectively communicate. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF 215 or THP 313 with C or better |
| THP | 331 | Costume Construction | Uses of materials and techniques for stage costumes with actual construction of period apparel. May be repeated for credit. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 214 with C or better |

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| THP | 332 | Makeup | Practical guide to the theory and practice of theatrical makeup. Basic principles of stage makeup design and application. Develops and increases skills in the application and design of the medium through a combination of reading assignments, lecture, demonstration and supervised practice sessions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Theatre (Design and Production) major or minimum 45 hours; Credit is allowed for only THP 332 or 494 (Makeup/Advanced Makeup) |
| THP | 335 | Advanced Stagecraft | Advanced construction techniques through applicable projects in carpentry and steel fabrication for theatre production in scenery and properties. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum sophomore standing; THP 213 (or THP 301 Production) with B or better; Credit is allowed for only THP 335 or 394 (Advanced Stagecraft) |
| THP | 340 | Scene Design | Studio projects in designing scenery for contemporary stages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 213 with C or better and THE 220 with C or better, or Digital Culture (Theatre) major |
| THP | 345 | Lighting Design | Principles and theories of stage lighting design, including design process and execution, advanced exploration of design implementation and equipment; course includes drafting and drawing. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum Junior standing or Design & Production student with minimum sophomore standing |
| THP | 350 | Sound Design | Introduces the equipment, process, and recording techniques used in sound design for the theatre. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre or Film student or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 351 | Arts Management | Management, organizational behavior, and human behavior in the arts; marketing, financing, and budgeting for the arts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA The Arts major or minimum 45 hours; Credit is allowed for only THP 351 or 394 (Management and the Arts) |
| THP | 352 | Foundations of Arts Entrepreneurship | Develops entrepreneurial knowledge and skills supporting the self-actualization, self-efficacy, and market acumen of artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger BA in the Arts student; HDA 210 or 294; Creativity and Innovation in Design and the Arts with C or better or Non- majors with minimum 42 hours |
| THP | 355 | Media Design for Performance | Introduces the fundamental skills, practices and theories for media and projection design for live performance, building on traditional areas of design for the theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre and Film or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 360 | Intermediate Playwriting | Continued development of skills in playwriting through specific exercises and completion of a full-length play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre- or Co-requisite: THP 260 (with C or better if completed) or Pre-requisite: ENG 210 |
| THP | 372 | Acting: Advanced Movement | Movement techniques for the classical and nonrealistic theatre. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 272 with B or better; Minimum junior standing |
| THP | 377 | Acting: Voice and Speech | Introduces phonetic alphabet, exercises, and techniques for voice and speech improvement. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 277 with B or better; Minimum junior standing |
| THP | 385 | Acting: Classical and Poetic Drama | Rehearsal and performance of Shakespeare and other classical playwrights. Emphasizes understanding poetic language, vocal and physical skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 (or THP 102) with B- or better; THP 277 with B- or better |
| THP | 386 | Acting: the Meisner Approach | Improvisations and exercises developed by Sanford Meisner applied to scene work. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 101 or THP 102 with B or better |
| THP | 387 | Acting: TV and Film | Professional television and film acting techniques, terminology, and on-camera experience. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre major, Theatre minor or Filmmaking Practices major; THF 101 (THP 101) or THP 102 with B or better, or Film and Media Production student |
| THP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 401 | Theatre Practicum | Production assignments for advanced students of technical production, stage and business management, and design. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 301 with a C or better, or Master of Arts or Master of Fine Arts student |
| THP | 406 | Advanced Scenography | Process of production collaboration among scenographers, directors, and playwrights. Taught in conjunction with THP 519. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master in Fine Arts student; THP 340 plus one of the following: THP 214, THP 313, or THP 345 with C or better |
| THP | 411 | Methods of Teaching Drama | Applies materials, techniques, and theories with grades K-8 youth. Regular participation with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 311 with A- or better or Graduate student; Credit is allowed for only THP 411 or 511 |
| THP | 418 | Directing III: Advanced Directing | Studio work building on skills learned in intermediate directing, culminating in the presentation of a fully rehearsed one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 318 with C or better or Herberger Master of Art or Master of Fine Arts student |
| THP | 420 | Acting: Solo and Collaborative Performance | Creation and development of original performance art works combining text, movement, multimedia, visual art; the actor as writer, designer, performer. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 or THP 102; minimum junior standing |
| THP | 428 | Theatre and the Future | Senior projects course that includes a culminating creative synthesis of student's knowledge. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THP 201 or THP 301 with C or better; THE 440 with C or better |
| THP | 431 | Advanced Costume Construction | Specialized training in costume construction problems and crafts with projects in tailoring, millinery, and period accessories. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre Design & Production or Digital Culture (Theatre) students; THP 214 and 331 with C or better or Theatre Performance Design student |
| THP | 435 | Technical Direction | Seminar in fundamental principles and practices of technical directors as managers, engineers and artisans in theatre production. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum junior standing; THP 213 and 301 (Theatrical Construction) OR THP 301 (Production) with B or better; Credit is allowed for only THP 435 or 494 (Technical Direction) |
| THP | 440 | Advanced Scene Design | Advanced studio projects in designing scenery for a variety of stage forms. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or must be a Theatre Scenography or Performance Design student |
| THP | 441 | Scene Painting | Studio projects in painting stage scenery. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or Theatre Scenography or Performance Design student |
| THP | 442 | Drawing | Techniques in drawing and rendering for scenic, costume, and lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 444 | Drafting for the Stage | Fundamentals of and practice in graphic techniques for the stage. Introduces computer-aided design for the stage. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 213 with C or better, or Theatre Performance Design or Digital Culture (Theatre) student |
| THP | 445 | Advanced Lighting Design | Specialized techniques in stage lighting. Advanced application of design process, graphic techniques of design presentation, and use of qualities of light. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP345 C or better, or Theatre Scenography or Performance Design student AND THP444 with B or better |
| THP | 448 | AutoCAD for Live Entertainment | Comprehension and practice of two-dimensional drafting techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THF 215 or THP 313 with C or better or Theatre Design and Production major; Credit is allowed for only THP 448 or 494 (AUTOCAD) |

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| THP | 449 | AutoCAD 3D for Live Entertainment | Comprehension and practice of 3D drafting and rendering techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THP 448 with C or better; Credit is allowed for only THP 449 or 494 (AutoCAD 3D) |
| THP | 450 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Herberger Institute for Design and the Arts student |
| THP | 451 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite: THP 450 |
| THP | 452 | Arts Entrepreneurship Seminar | Challenges students to learn how individuals have used their creative skills to create new arts business models. Case studies examine how creativity can spur new opportunities in the arts industry. Students complete their own project proposals. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 352 with C or better |
| THP | 455 | Advanced Media Design | Explores advanced skills, practices and theories for media and projection design for live performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Dance, Film or Theatre major; THP 355 with C or better; Credit is allowed for only THP 455 or THP 494 (Advanced Media Design) |
| THP | 457 | Digital Portfolio | Cross-disciplinary exploration of methods, technologies and aesthetics of portfolio presentation for professional designers and artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): The Arts (Fashion Design) or Theatre (Design and Production) major; minimum 56 hours. Credit is allowed for only THP 457 or 494 (Digital Portfolio) |
| THP | 482 | Theatre for Social Change | Interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisite: Minimum sophomore standing |
| THP | 483 | Acting: Viewpoints and Composition | Training in Anne Bogart's viewpoints and composition techniques; application to rehearsal and performance, and creating new work. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 202 with C or better (or BA Performance and Movement major), junior standing or higher or MFA major |
| THP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Theatre or Film student |
| THP | 489 | Acting: Audition Techniques and Career Development | Familiarization with the business of performance: preparation and techniques for auditioning; self-promotion and marketing strategies; grant resources, interviews, and unions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 102 or THF 101 with B or better; THF 220 (THE 220) with B or better, minimum junior standing |
| THP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| THP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| THP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | Prerequisites: Theatre Design & Production student |
| THP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 501 | Performance: Solo Performance | Students begin to define their mission in art. Emphasizes the actor as a solo storyteller, speaking as herself or himself. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-8 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student |
| THP | 505 | Graduate Colloquium | Orientation to graduate study of theatrical practice; cohort development, introduction to the advanced literature and media in the art form. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Master of Fine Art Theatre student |
| THP | 506 | Design Collaboration | Process of production collaboration. Taught in conjunction with THP 519. May be repeated for credit. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student; |
| THP | 511 | Methods of Teaching Drama | Applies dramatic materials, techniques, and theories with grades K-8 youth. Regular participation with children. Credit is allowed for only THP 511 or 411. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 512 | Puppetry Workshop | Surveys puppetry in education, puppetry as an art form in design and performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student |
| THP | 513 | Touring Theatre | Provides an understanding of the theories and aesthetics of touring theatre and a practice in its conceptualization, creation, administration, and production. Examines a variety of styles and methods of creating "movable" theatrical material, focusing on forms that require minimal scenic and design support. Focuses on process and working toward a quality product. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Fine Arts Graduate student; Credit is allowed for only THP 513 or 598 (Touring Theatre) |
| THP | 514 | Projects in Community-Based Theatre | Theories and techniques of improvisational theatre with emphasis on youth. Stresses professional development through projects combining research, theory, and practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: Master in Arts, Master in Fine Arts or PHD Theatre major |
| THP | 517 | Stage Management | Advanced study of the principles and practices of stage management in the professional theatre. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 518 | Advanced Directing Lab | Active discovery of directing concepts through practical exercises and collaboration; deconstruction of contemporary/classic literature. Explores director as primary artist. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |

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| THP | 519 | Directing: Works in Progress | Advanced projects in directing concentrating on a collaborative process among director, playwright, actors, and designers. Focuses primarily on new scripts or adaptations of literature. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 520 | Directing the New Play | Advanced methods and studies in directing, focusing on new play development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 521 | Performance I: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination; emphasizes physical diagnostics and development. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 522 | Performance I: Acting and Voice | Advanced studio work in the performer's voice; emphasizes physical awareness, vocal anatomy, training, and interpretation of texts. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 523 | Performance II: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 524 | Performance II: Acting and Voice | Advanced studio work in the performer's voice. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 525 | Design I: Conceptualization and Collaboration | Conceptual structures of the design process in theatre; development of creativity, flexibility, and communication in the collaborative process. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 526 | Design I: Drawing and Rendering | Development of drawing and rendering skills, techniques, and evaluation in the presentation, realization, and communication of performance design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 527 | Design II: Conceptualization and Collaboration | Offers students the chance to develop advanced skills in creating fully realized design ideas, particularly in working with new and experimental forms. Through the coursework, readings, and projects, students develop new methods and systems of thought for dealing with challenging dramatic works. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Master of Fine Arts Theatre major |
| THP | 528 | Design II: Visualization and Presentation | Advanced skills and techniques in rendering, visualizing and presenting design ideas and materials for performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 529 | Viewpoints and Composition | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 540 | Scene Design Applications | Conceptual and practical application of the design process including graphic and sculptural projects. Practical design problems investigated in a lab. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Art or Master of Fine Art Theatre student |
| THP | 545 | Lighting Design Applications | Advanced studio projects in stage lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 550 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Theatre student |
| THP | 551 | Arts Management | Advanced study of the principles and practices of arts management in the nonprofit and for-profit sectors. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 552 | Arts Entrepreneurship | Project-based course in new venture creation for the arts. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 555 | Media Design Applications | Advanced applications for skills and practices in media design for live performance, including content creation, systems design, and playback. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 556 | Performance Technology | Examines issues surrounding the integration of live performance and digital media. Students study the work of contemporary practitioners and theorists and experiment with creating their own works of digital art. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate Theatre major |
| THP | 557 | The Digital Portfolio | Crossdisciplinary exploration of methods, technologies, and aesthetics for portfolio presentation for professional designers and artists. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| THP | 560 | Dramatic Writer's Workshop | Practice and study of creating characters, dialogue, scenes, plays, and monologues for the stage. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre Master of Arts or Master of Fine Arts student |
| THP | 561 | Scripts in Progress | Studio work with the instructor centered on revisions of original plays. | N | IND | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 582 | Theatre for Social Change | Advanced, interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate or Doctoral student |
| THP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Theatre student |
| THP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre Master of Arts or Master of Fine Arts student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| THP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Fine Arts Graduate student |
| THP | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): Fine Arts graduate student |
| THP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art or Dramatic Writing Theatre student |
| THP | 611 | Research in Drama Education | Current research practices in drama education. Development and execution of research projects in ethnographic and arts-based models. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 618 | Theatre for Youth Practicum | Practical experience in theatre for youth projects: improvisation, education, production. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2-3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 649 | Design Studio | Projects include design of scenery, costume, lighting, or sound for lab or mainstage productions. | N | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Fine Arts or PhD Theatre student |
| THP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| TMC | 110 | Understanding the Enterprise | Introduces essential functions required in technology-based and innovative enterprises and viewed in the context of their relationship to each other; examines the enterprise's role in society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only TMC 110 or TEM 194 (Introduction to Technology Development) |
| TMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 300 | Career Management | Provides professional program business administration students with information on ASU business-related courses, business careers, interviewing, job hunting, and résumé skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): minimum 56 hours |
| TMC | 310 | Promotion of the Enterprise | Building and maintaining customers with an emphasis on developing a market identity and sales for technology-based and innovative enterprises. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110 OR minimum 56 hours |
| TMC | 320 | Funding the Enterprise | Focuses on financial resource management techniques utilized by U.S. domestic companies and covers the unique aspects of revenue accounting and its application to company operations. Concepts covered include: data capture of requisite information from various computer systems; determination of revenues generated from sales of products and services to customers; in-depth analysis of operational expenses; preparation of accounting and financial data; monthly accounting requirements; account reconciliation; monthly/quarterly/annual reporting; development and analysis of financial reports and billing. Emphasizes accounting, planning and valuation concerns, as well as financial trends and industry prospects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 110 or TEM 194 (Introduction to Technology Development) |
| TMC | 330 | Leading the Enterprise | Essential practices for managers, including planning, organizing, leading and controlling the enterprise. Studies current issues affecting managers such as sustainability, environmental protection, work groups, globalization, technology management, entrepreneurship, diversity and continuous improvement. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Minimum junior standing |

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| TMC | 331 | Quality Assurance | Instrumentation and methodologies for materials testing and quality control in various manufacturing processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre- or corequisite(s): ABS 350 (or AGB 360, ECN 221, EGR 280, PSY 230, STP 420, STS 401 or TEM 420); TMC 330 (or TMC 346) |
| TMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 396 | Professional Orientation | Senior advising, industry presentations, and career counseling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum junior standing; Credit is allowed for only TMC 396 or GIT 396 |
| TMC | 410 | Enterprise Operations | Emphasizes basic principles of enterprise operations management, including productivity, strategic management, global environment, forecasting, capacity planning, new technologies, location and layout strategies, supply-chain management, inventory control and scheduling. Uses common decision-making issues and related qualitative and quantitative techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 |
| TMC | 430 | Enterprise Strategy and Innovation | Enterprise strategic plan development and implementation, concepts of open innovation; vision, mission, steps of strategic plan development; strategic goals, objectives, tasks, schedule, resource considerations; organization's strengths and weaknesses; environmental opportunities and threats; strategy implementation, impact assessment and refinement, organizational- and management considerations, theory and practice of open innovation. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330; Credit is allowed for only OMT 494, Strategic Planng/Mgt or TMC 430 |
| TMC | 470 | Enterprise Planning and Implementation | Investigates and tests tools and techniques for effective design and management of enterprise projects and programs using computer applications. Develops and demonstrates teambuilding and leadership skills in course projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 OR W.P. Carey BA Technology major with MGT 300. Credit is allowed for only OMT 570 or TMC 470 |
| TMC | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only ETM 480, GIT 480 or TMC 480 |
| TMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | Prerequisites:Fulton Polytechnic School undergraduate or graduate student AND have a 2.25 GPA or better |
| TMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum 3.00 GPA |
| TMC | 555 | Leadership and Teams | Evaluates and discusses the latest research in leadership and teams in terms of accomplishing set goals efficiently and effectively both within large organizations and smaller groups. Addresses management and leadership styles and concepts such as team cognition and team situational awareness. Seminar-style course with a large amount of reading, discussion, synthesis and application of current research. Field trips to local airline operations and high-operational tempo organizations accompany the readings and in-class discussions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |

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| TSS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 501 | A Deep History of the United States/Mexico Borderlands I | Using a comparative and relational approach, the seminar explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from pre-contact times to the Mexican American War. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 502 | A Deep History of the United States/Mexico Borderlands II | Using a comparative and relational approach, explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from the Mexican American War to the recent past. Centers on comparative economic growth and development of Mexico and the United States, the impact of unequal development on the border region and its people, and the development of a transnational society in the U.S./Mexico borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 503 | Epistemologies and Transborder Thought | Examines different approaches to the production and critique of knowledge relevant to transborder social, political, economic, cultural, and institutional structures and processes. The complexity of these structures and processes require transdisciplinary methods of inquiry that go beyond a single set of disciplinary assumptions. Explores the transdisciplinary articulation of theory and method, and considers the strengths and limitations of various approaches and critiques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 504 | Tools for Transborder Research | Focuses on the selection of methods appropriate for transborder research. Considers the pitfalls of conducting monodisciplinary research in a stratified, differentiated and multicausal world; the most robust methods used in various approaches; the main methodological obstacles to transdisciplinary research; and the challenges of using mixed methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 505 | Theories and Methods of Migration, Health & Applied Social Policy in a Transborder Context | Divided conceptually in three broad analytical areas: (1) migration with an emphasis on demography, (2) health with an emphasis on epidemiology, and (3) public policy analysis. Provides basic training in the application and interpretation of quantitative and qualitative methods and techniques commonly used in researching these areas. Applies these techniques to issues that are specific to the reality of transborder and/or transnational contexts. Students are required to apply and present an analysis in their field of interest which demonstrates their grasp of theory and method. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 506 | Theory and Methods of Transborder Media and Expressive Culture | Overview of the interdisciplinary theories and methods employed to research and analyze media and creative cultural production. Objects of analysis include literature, film, live performance, theater, Web-based media, popular culture production, and visual arts. Required readings elucidate strengths, limitations, and applicability of particular theories and methods to different types of creative expression and media production as well as to their historical and political contexts. Students engage with, critique, and contribute to the theories and methods presented in the course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 507 | Theory and Methods of Transborder Cultural Acquisition, Language Development, and Learning | This course familiarizes graduate students with literature on relationship between culture, language, and learning, and their theoretical and methodological underpinnings within a transborder context. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 601 | Internship in Transborder Studies | Academic internship helps students become full participants in globalized, transnational contexts through a combination of practical experiences in community organizations, readings about transnational life in globalized contexts, reflection, and discussion. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TSS | 607 | Colloquium in Transborder Studies | Provide students the opportunity to present their skills, learning, research, and topical interests before an open forum of faculty and students at the beginning of their third year and prior to their dissertation research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 608 | Transmitting Transborder Studies to Publics and Institutions | Provides students with the most recent advancements in presenting the underlying theory, methods, and techniques in transborder analysis and application. Designed to enter multiple audiences in public, professional, academic, and school settings, course takes advantage of the latest developments in multimedia, print, and electronic technology, film, and print in order to provide systematic and detailed learning opportunities. Provides the basis of developing capacities to create and develop learning modules, and programs on issues of transborder political ecology, economic transformations, cultural development and emergence, literary constructions and projections, and issues of identity, class, and gender. Course is conducted bilingually and makes use of Spanish- and English-language resources. For this reason, it is advisable, but not required, that students are at least conversationally proficient with Spanish and English. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 609 | Prospectus Design in Transborder Studies | Provides doctoral students with the necessary tools to prepare a research proposal that could be submitted as a dissertation prospectus or to a funding agency. Students bring a well-formulated idea of the kind of research they wish to pursue for their dissertation. They also bring a clear idea of the relevant concepts, literature and methods, required to complete the proposal. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 611 | Comparative and Transborder Perspectives on Learning | This small class emphasizes discussion, presentations by students, and written research papers. Surveys theoretical and methodological aspects related to the use of comparative and transborder perspectives to the study of education. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 612 | The Political Culture of Learning & Change in Transborder Context | Examines a variety of development and learning issues confronting linguistically and culturally diverse groups with an emphasis on immigrant children and families. Includes such topics as: (1) Theoretical foundations and their related impact on organizing interventions for learning and socialization. (2) The intersection of the development of language, culture, and learning in context of linguistic diversity and immigration. (3) The influence and impact of public policy on language minority groups of immigrant backgrounds. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 614 | Bilingualism in Diverse Acquisition and Practicing Contexts | Examines bilingualism, language in society, and languages in contact in transborder contexts and bilingual schooling. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): PhD student |
| TSS | 615 | Dialectical Inquiry in Transborder Contexts | Introduces the application of dialectical inquiry in value-relevant grounded research methods as a complementary approach to value-free scientific inquiry into practical problems in transborder cultural acquisition, language development, and learning. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TSS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Transborder Studies | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 301 | Fundamentals of Writing for Digital Media | Foundational concepts and technologies of writing for a variety of digital media. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 347 | Written Communication for Managers | Strategies, techniques and genres for developing and presenting information intended for business and other workplace audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 361 | Writing for Health Care Management | Strategies, formats, and techniques for effective writing and presentation of information for nursing professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better; RN-BSN student. Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 362 | Writing in Health Professions | Focuses on effective communication practices in health-related fields, emphasizing communicating professionally with both scholarly and workplace audiences. In addition to providing a foundation in workplace communication, emphasizes information and technology literacy to help students become proficient in collecting, analyzing, interpreting and synthesizing information using appropriate tools, sources and styles. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Medical Studies major or Nursing and Health Innovation student; Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 401 | Fundamentals of Technical Communication | Basic information design principles for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres and technical communication tools. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 401 or TWC 501 |
| TWC | 403 | Writing for Professional Publication | Analyzes the market and examines the publication process, including the roles of the author, editor, and reviewer. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 411 | Principles of Visual Communication | Principles and tools of visual communication in print and electronic media, with an emphasis on document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 411 or TWC 511 |
| TWC | 414 | Visualizing Data and Information | Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only TWC 414 or TWC 494 (Visualizing Information or Information Visualization) or TWC 514 or TWC 598 (Visualizing Information or Information Visualization) |
| TWC | 421 | Principles of Web Authoring | Principles of writing for the Web, including information architecture, accessibility, usability and responsive design. Explores basics of markup language and content management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 421 or TWC 521 |
| TWC | 422 | Social Media in the Workplace | Analyzes different social media platforms and develops strategies and techniques for effective and appropriate use of social media in the workplace. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TWC 422 or TWC 494 (Social Media in the Workplace) |
| TWC | 431 | Principles of Technical Editing | Principles and techniques of technical editing for print and electronic media, including standards, styles, copyediting, comprehensive editing and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 431 or TWC 531 |
| TWC | 435 | Global Issues in Technical Communication | Helps students understand issues that shape workplace communication in a global environment. Technical communicators are expected to be specialists who interact effectively with a broad range of audiences. Given the global nature of today's workplace, those audiences typically include people from many cultures and countries. Through readings, written assignments, and analysis of case studies, documents, and websites, explores ways in which culture and language shape professional interactions. Also examines other critical issues such as translation, localization, technology and distributed work teams that impact writing and designing documents in a globalized work environment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TWC 435 or TWC 494 (Global Issues in Technical Communication) |
| TWC | 443 | Grant & Proposal Writing | Develops persuasive strategies and approaches for researching and writing professional funding proposals and grant applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 443 or TWC 543 |
| TWC | 444 | User Experience | Explores principles, techniques and tools of user experience (UX), including user and task analysis, user-centered design and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 444 or TWC 544 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TWC | 445 | Content Management and Topic-Based Authoring | Explores concepts, techniques, strategies and technologies for authoring, managing, and publishing reusable content in online documentation, help files and other types of technical communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 445 or TWC 545 |
| TWC | 446 | Technical and Scientific Reports | Explores strategies and techniques for developing informational and analytical reports in a range of genres and for a variety of audiences in scientific and technical fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 446 or TWC 546 |
| TWC | 451 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws, with emphasis on electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 451 or 551 |
| TWC | 452 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 452 or 552 |
| TWC | 453 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 453 or 553 |
| TWC | 454 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 454 or 554 |
| TWC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 490 | Capstone | Development of a professional portfolio, creation of a culminating document, and synthesis of undergraduate experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| TWC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TWC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| TWC | 501 | Fundamentals of Technical Communication | Basic information design principles for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres and technical communication tools. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 401 or TWC 501 |
| TWC | 504 | Applied Rhetoric and Technical Communication | Foundation in applied and technical communication. Covers the emergence and development of technical communication as a profession and field; rhetorical concepts and their application to technical and applied communication, ethical issues; and the impact of internationalization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |
| TWC | 505 | Research in Technical and Applied Communication | Explores the research process and methods appropriate for technical and professional communication. Provides a foundation for understanding the research process; designing and planning valid research within the context of technical and professional communication; collecting and interpreting information, ethical issues related to research; and reporting results. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |
| TWC | 511 | Principles of Visual Communication | Principles and tools of visual communication in print and electronic media, with an emphasis on document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 411 or 511 |
| TWC | 514 | Visualizing Data and Information | Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 414 or TWC 494 (Information Visualization or Visualizing Information) or TWC 514 or TWC 598 (Information Visualization or Visualizing Information) |
| TWC | 521 | Principles of Web Authoring | Principles of writing for the Web, including information architecture, accessibility, usability and responsive design. Explores basics of markup language and content management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 421 or TWC 521 |
| TWC | 522 | Social Media in the Workplace | Analyzes different social media platforms and develops strategies and techniques for effective and appropriate use of social media in the workplace. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only TWC 422 or TWC 522 |
| TWC | 531 | Principles of Technical Editing | Principles and techniques of technical editing for print and electronic media, including standards, styles, copyediting, comprehensive editing and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 431 or TWC 531 |

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| TWC | 535 | Global Issues in Technical Communication | Helps students understand issues that shape workplace communication in a global environment. Technical communicators are expected to be specialists who interact effectively with a broad range of audiences. Given the global nature of today's workplace, those audiences typically include people from many cultures and countries. Through readings, written assignments, and analysis of case studies, documents and Websites, explores ways in which culture and language shape professional interactions. Also examines other critical issues such as translation, localization, technology and distributed work teams that impact writing and designing documents in a globalized work environment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only TWC 535 or TWC 598 (Global Issues in Technical Communication) |
| TWC | 543 | Grant & Proposal Writing | Develops persuasive strategies and approaches for researching and writing professional funding proposals and grant applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 443 or TWC 543 |
| TWC | 544 | User Experience | Explores principles, techniques and tools of user experience (UX), including user and task analysis, user-centered design and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 444 or TWC 544 |
| TWC | 545 | Content Management and Topic-Based Authoring | Explores concepts, techniques, strategies and technologies for authoring, managing and publishing reusable content in online documentation, help files and other types of technical communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 445 or TWC 545 |
| TWC | 546 | Technical and Scientific Reports | Explores strategies and techniques for developing informational and analytical reports in a range of genres and for a variety of audiences in scientific and technical fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 446 or TWC 546 |
| TWC | 551 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws; emphasizes electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 451 or 551 |
| TWC | 552 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 452 or 552 |
| TWC | 553 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 453 or 553 |
| TWC | 554 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 454 or 554 |
| TWC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | |
| TWC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| UET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 305 | Introduction to Microelectronics | Quantifies the role of microelectronics technology and its associated skills as drivers for electronics systems development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Academic Level greater than or equal to Junior |
| UET | 331 | Electronic Materials | Physical, chemical, electromagnetic, and mechanical properties of electronic materials. Solid-state device characteristics and their material properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210; CHM 113; PHY 112 OR Applied Science (Electronic Energy Systems) BAS student |

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| UET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 411 | Layer Deposition Technology | Fundamentals, applications, and vacuum technology of layer deposition processes used in IC fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit for UET 411or 511 |
| UET | 416 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit is allowed for only UET 416 or 516 |
| UET | 418 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331; Credit is allowed for only UET 418 or 518 |
| UET | 432 | Semiconductor Packaging and Heat Transfer | Packaging theory and techniques; hermetic and plastic assembly; thermal management; electrical characteristics and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331. Credit is allowed for only UET 432 or 532 |
| UET | 437 | Process Control and Validation | Statistical process control and its application to IC fabrication. Design, control, and performance validation techniques throughout the manufacturing process. Lecture with Web support. Prerequisite: 300-level statistics course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre/Co-requisite: UET 417 with C or better or Co-enrolled in UET 417 |
| UET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| UET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| UET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| UET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 516 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate status. Credit is allowed for only UET 416 or 516 |
| UET | 518 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 418 or 518 |
| UET | 524 | Pattern Transfer Technology | Maskmaking, lithography, and etch processes for integrated circuit fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 424 or 524 |
| UET | 532 | IC Packaging | IC packaging theory and techniques; assembly techniques, material issues; thermal management; electrical performance and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 432 or 532 |
| UET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) with a 3.0 GPA or better OR be a Fulton Polytechnic School senior with a 3.0 GPA or better |
| UET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |

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| UET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UNI | 400 | Society and the Individual | Various social institutions, how they shape the socialization process of a group and individual and give a community meaning, values and a set of norms. Focuses on Arizona as a case study for student research inquiries. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: Bachelor of General Studies major; Minimum 2.00 GPA; Minimum 90 hours; Credit is allowed for only UNI 400 or COM 494 (Society and the Individual) |
| UNI | 101 | Student Success Seminar | Understanding human diversity, perspectives, and values as they relate to student success. Orientation to ASU resources, study skills, and academic and social issues for students. Seminar, discussion. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 110 | Critical Reading and Thinking | Prepares students to be successful in college-level academics and helps them improve their critical reading and critical thinking skills. | N | LEC | N | OPT | University College | Dean, University College | 3 | | |
| UNI | 120 | Academic Success | Assists students in creating strategies for success in their academic lives. Students explore personal and academic strengths and barriers that impact success, identify and utilize university resources available to support success at ASU, acquire and enhance academic skills necessary for success in the university, and discover ways to stay on course to meet academic goals. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only ASU 150 or UNI 120 or UNI 194 (Academic Success: Residential, Academic Success: Off-Campus, or Academic Success Seminar) |
| UNI | 150 | Major and Career Exploration | Concepts and skills in the process of selecting a major: self-assessment, research, interviewing, and decision making. Exploration of ASU opportunities and investigation of career options. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | University College | Dean, University College | 1-4 | | |
| UNI | 220 | Academic Refresher | Assists students who find themselves in academic trouble (failed courses, academic probations, disqualification). Students explore the barriers that may be keeping them from reaching their academic goals and acquire tools to overcome those challenges. Topics include self management, self assessment, lifelong learning, and interdependence. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only UNI 220 or 294 (Academic Refresher) |
| UNI | 250 | Choosing a Major | Advanced, one-hour career development course helps students make a thoughtful selection of major and consider the career direction that fits best for them. Students complete advanced assessments of interests, personality, and values; investigate relevant majors and careers, including connecting with working professionals; learn effective decision-making strategies; identify barriers and resources; and make connections to new major department. | N | SEM | Y | OPT | University College | Dean, University College | 1 | | Pre-requisites: UNI 150 Career Exploration with a C or better |
| UNI | 270 | Career Direction for a Successful Future | Actively engages students in their educational and career-planning process by exploring factors that influence personal decision making and planning for the future. Students examine their strengths and personal narrative, identify decision making factors, research career development and a particular career, and develop teamwork skills for the workplace. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Pre-requisite: UNI 250 with C or better; Credit is allowed for only UNI 270 or 294 (Next Steps in Career & Major Exploration) |
| UNI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| UNI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | Prerequisite(s): minimum 45 hours |
| UNI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | University College | Dean, University College | 1-12 | | |
| UNI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| URB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 220 | Introduction to Urban America | Investigates traditional and evolving forms of civic engagement and management. Examines leadership and organizational models to urban development and decision making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 240 | Urban Policy | Examines major theories about the purposes and processes of urban policy formulation, adoption, and implementation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | C | |
| URB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 300 | Urban and Metropolitan Studies | Examines the city using a multidisciplinary approach drawing from different historical, cultural, social, philosophical, and economic issues and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Credit is allowed for only URB 100 or 300 |
| URB | 301 | Urban Research | Introduces the philosophy, scope, and methods of urban affairs research. Includes an overview of quantitative and qualitative methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |

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| URB | 302 | Urban Theory | Examines the sociological, economic, and political theoretical positions underlying the development and evolution of metropolitan areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 305 | Urban Governance | Examines major shifts and trends in urban America. Concentrates on the changing approaches to governance and policies of urban areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Credit for URB 105 or 305 |
| URB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 400 | Senior Professional Seminar | Demonstrates completion of the urban studies program by synthesizing and applying core knowledge, skills, and abilities to significant urban issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 405 | Citizen Engagement and Community Building | Develops a conceptual, critical, and practical understanding of urban dwellers' involvement in community affairs as citizens and as builders of vital neighborhoods and vibrant cities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 30 hours |
| URB | 406 | Public Administration & Community Development | Critically examines the concepts community and development and considers how important forces such as diversity, civic life, changes in social space, and globalization, affect our understandings about these concepts and influence our actions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 30 hours |
| URB | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: minimum 30 hours; Credit is allowed for only URB 410 or PAF 410 |
| URB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| URB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| URB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| USL | 210 | Service Learning: Intro to Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions, and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship, and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | |
| USL | 216 | Service Learning: For Educators | Examines the effects of social justice issues on student achievement. Correlates academic coursework with required community service to analyze community needs, the importance of civic engagement and community issues affecting ethnic minorities and marginalized populations in contemporary American society, particularly how it applies to our education system. Students dedicate a minimum of 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services) directly serving high-needs youth or adults. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and social injustices, and how to utilize this knowledge in the teaching profession to better serve all students. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisite: Mary Lou Fulton Teachers College major |
| USL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| USL | 402 | Service Learning: Education & Youth | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement, and an in-depth study of the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society as they apply to education in Arizona and the United States (policy, student achievement, teacher and administration effectiveness and parental involvement). Students dedicate 100 service hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies), directly serving high-needs youth. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and the importance of civic engagement particularly how it applies to the education system. Provides real-world experiences that exercise advanced academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 hours |
| USL | 410 | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |
| USL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| USL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| USL | 496 | Service Learning Capstone | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Applies theory from service learning pedagogy and educational studies to real-world application and academic success. Provides field experience for students to exercise academic knowledge and skills applicable to career experience and program studies. Students must (a) successfully assess a community need in education that correlates to current research and (b) collectively plan a sustainable service project that benefits high-needs children. The student-directed service project addresses social justice issues in education related to corresponding research. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 or 216 |
| USL | 497 | Service Learning Capstone Project | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Implements a sustainable service project addressing social justice issues in education. Student-directed project corresponds to research and planning completed during the previous semester. Provides field experiences for students to implement academic knowledge and skills acquired through the Educational Studies program and to create realistic solutions to national and local community issues that impact student achievement. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 (216); 410 and 496 |
| VTN | 101 | Elementary Vietnamese I | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| VTN | 102 | Elementary Vietnamese II | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:VTN 101 with C or better |
| VTN | 201 | Intermediate Vietnamese I | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 102 with C or better |
| VTN | 202 | Intermediate Vietnamese II | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 201 with C or better |
| VTN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 321 | Advanced Vietnamese and Literature I | Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite : VTN 202 |
| VTN | 322 | Advanced Vietnamese and Literature II | Continuation of VTN 321. Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite: VTN 321 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| VTN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| WAC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Department of English | 1-4 | | |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0-460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WPC | 101 | Student Success in Business | Introduces students to resources that help them to succeed in the W. P. Carey School of Business. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WPC | 196 | WPC Domestic Exchange Placeholder | Reserved for undergraduate participants in a W.P. Carey Domestic Exchange program. This placeholder course remains on the student's academic record until the student's record is updated by WPC following the completion of the student's domestic exchange program. This course is then dropped and replaced with the ASU course(s), credit(s), and grade(s) equivalent to the coursework completed during the domestic exchange program. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete during the domestic exchange program. Acceptance to an WPC Domestic Exchange program is required. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-18 | | |
| WPC | 201 | Business Student Development | Introductory business course for students transferring into the W. P. Carey School of Business. Focuses on ASU resources and developing professionalism. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 1 | | Prerequisite(s): WPC major with 15-44 earned hours. Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WPC | 301 | Business Forum | Provides professional program business students with information on careers, interviewing, job hunting, and resumé skills. Must be taken in the first semester of the professional program for business students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Pre-requisites: Must be a W.P. Carey degree program business student |
| WPC | 302 | Honors Professional Development | Provides a foundation for developing key professional knowledge and skills required for future business and personal success. Strategic thinking and design, scenario development, verbal and written persuasion, direct marketing techniques, systems thinking, relationship development, research design, and decision-making models. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | |
| WPC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Pre-requisites: Must have a minimum GPA of 2.00; Must have a minimum total earned hours of 56 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WPC | 480 | W. P. Carey Capstone Course | Develops a general manager's or business owner's perspective on how organizations can create value. Creating long-run value by repeatedly producing goods and services that customers will buy at prices that cover the costs of producing them is the key to success for business organizations. Analyzing current and future environments to understand threats and opportunities in various institutional settings around the world is the starting point for thinking about how an organization might create value and gain sustainable competitive advantage. Evaluates the impact of institutional settings in different countries and ethical values on decision making. Students learn how to successfully manage relations with key stakeholders including customers, employees, suppliers of capital as well as other component goods and services, and stakeholders from various levels of government in different countries. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 3 | L | Pre-requisites: W. P. Carey B.S. student, senior standing, and all W. P. Carey business core courses: WPC 301 or 302, LES 305, FIN 300 or 302 or 303, MKT 300 or 302 or 303, MGT 300 or 303, SCM 300 or 303, and international bus course, all with C or better |
| WPC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-12 | | |
| WPC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WPC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Pre-requisites: Must be W. P. Carey BS or BA degree program student; junior or senior standing. |
| WPC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-3 | | |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| WST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| WST | 270 | Global Perspectives on Women | Through lectures, creative class activities and discussions, presents a comprehensive overview of gender and globalization with special emphasis on lived realities of women worldwide. Understands women's lives and gendered experiences through the issues of work, identities (nationality, race, class, age, ability), bodies and embodiment, belief systems, political economy and difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only WST 270 or 294 (Global Perspective on Women) |
| WST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| WST | 313 | Women and Sexuality | Explores U.S. women's sexuality in social context, including how women's sexuality is portrayed in popular media, medicine and education; how girls learn to think about sexuality; and how public policies address women's sexuality. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 318 | African and African Diaspora Women Writers | An in-depth study of themes such as race, class, gender, and ethnicity in the creative fiction of black women writers of African descent in the United States, the Caribbean, and Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| WST | 320 | Gender, Drugs and Alcohol | Drug and alcohol use have multiple and diverse meanings shaped by their historical, social and cultural context. Examines how and why alcohol and drug use have been identified as social problems and the role of gender in shaping this process. Reviews multiple social and cultural aspects of gender, drug and alcohol use, as well as the emergence of gender-based health disparities within this context. Fulfills a science and society requirement. Basic scientific principles such as the formulation of research questions, data collection and analysis, have been used to develop our understanding of gender, drugs and alcohol. How society influences the nature of those questions, the perceived value attached to particular scientific studies over others, and how to critically evaluate law and policy around drugs and alcohol in light of those studies. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 30 hours; Credit is allowed for only WST 320 or WST 394 (Gender, Drugs and Alcohol) |
| WST | 330 | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | 331 | Asian Pacific American Genders and Sexualities | Explores gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only APA 330 or WST 331 |
| WST | 340 | Gender, Science, and Technology | In-depth examination of the complex interrelationships of gender, science, technology, and society in a number of different contexts. Looks at the participation of women in scientific and technical fields both historically and cross-culturally, and addresses such topics as: gender segregation by status and discipline, feminist theories of gender and science, the conditions under which women have succeeded in the sciences, gender and biological determinism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 345 | Gender, Religion, and Global Violence | In-depth study of forms of gendered violence in which religion plays a key role in either the practice or perpetuation of that form of violence in a myriad of cultures and contexts. Analyzes current responses and proposes new approaches to combating or redefining these forms of violence, emphasizing the need to understand and respect the religious and cultural contexts in which these actions occur. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 360 | Women as Healers | Advanced examination of the role of women as caregivers, healers, physicians, midwives, and nurses in different cultures and historical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 364 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 earned hours; Credit is allowed for only AFR 365 (or AFH364) or WST 364 |
| WST | 365 | Women and International Health | Advanced study of gender-based disparities and global health, including impact of poverty, gender discrimination, political economy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 371 | Sex and the City: Women, Sexuality, and Popular Culture | An in-depth study of the changing media representations of young, sexually autonomous women in the city. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 372 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better or minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| WST | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |
| WST | 374 | Desperate Housewives | In-depth examination of the representations of women as wives and/or mothers in the popular discourse from the 20th century to current day through an analysis of various forms of popular culture such as film, magazines, popular writing and television. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Minimum 30 hours; Credit is allowed for only WST 374 or 394 (Desp Housewives: Gender, Family & Pop Culture) |
| WST | 375 | Women and Social Change | In-depth course on feminist activism and social change. Combines research and theory on a contemporary social problem with a community action experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 377 | History of American Feminist Thought | Critical analysis of the origins and development of American feminist thought and political movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | H & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 378 | Global Feminist Theory | In-depth studies of global feminist theories and exploration of the intersections of gender, race, ethnicity, class, and nation through critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C & G | Pre-requisites: WST 100 or 300 or minimum 30 hours |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 382 | American Indian Women | Investigate the economic, political and ideological factors contributing to American Indian women's intellectual and creative activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: WST 100, 300, or AIS 180 with a C or better; or co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit for only AIS 381 or WST 382 |
| WST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | 413 | Queer Studies | In depth exploration of lesbian, gay, bisexual, transgender, and queer experiences in the U.S. and globally, from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 45 hours |
| WST | 420 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| WST | 421 | Girlhood and Adolescence | Critical analysis of the changing construction of girlhood and female adolescence through history, memoir, fiction, myth, music, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: WST 100 or WST 300 or minimum 30 hours |
| WST | 422 | Women, Law and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 36 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 422 or WST 422 |
| WST | 440 | Politics of Women's Health | In-depth and interdisciplinary exploration of how women's social, cultural, and economic position affect their health and health care. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 447 | Gender, Culture, and Development | In depth analysis of gender roles related to health, family, work, education, and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): WST 100 (or WST 300) or minimum 45 hours. Credit is allowed for only SGS 454, TCL 447, WST 447 or TCL 598 (Gender, Culture & Development) |
| WST | 460 | Women and the Body | In-depth analysis of the cultural construction of the gendered body and societal prescriptions about beauty, body image, and size. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 470 | Gender and Popular Culture | Advanced interdisciplinary examination of how gender is constructed in various popular cultural forms such as film, television, magazines, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 471 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| WST | 477 | Women and Violence | Critical examination of forms of violence against women globally at individual, institutional, and cultural levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 earned hours; Credit is allowed for only TCL 490 or WST 490 |
| WST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| WST | 501 | Foundations of Feminist Thought | Provides key concepts and theories that have shaped the field of women and gender studies. Also provides overview of resources for research in women's studies scholarship at ASU and prepares students to participate in the field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only WST 501 or WST 691 (Foundations of Fem Thought) |
| WST | 502 | Interdisciplinary Gender Research Methods | Describes the ways in which feminist scholars conceptualize and design their research. Explores the decisions scholars make in their research including the choice of research topics, applications of feminist theories and methodologies, the choice of methods and how and why feminist scholars have increasingly incorporated interdisciplinary methods, and what is at stake in these decisions for the research design and research outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| WST | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) ; Credit is allowed for only PUP 547 or WST 547 |

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| WST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: degree-seeking graduate students only |
| WST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| WST | 598 | Special Topics | Topical courses not offered in regular course rotation—e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | LEC | N | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 601 | Critical Concepts of Gender | Key concepts, theoretical frameworks, disciplinary and interdisciplinary approaches, and the critical debates that have shaped the field of gender studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 602 | Mapping the Intersections of Gender | Theoretical concepts, metaphors, and frameworks employed by feminist scholars to understand the way gender articulates with other categories of difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 603 | Engendering Methodology | Focuses on the methodologies, epistemologies, and ethical dilemmas of researching gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 640 | Visual and Narrative Culture | Feminist analysis of gender representations in visual and narrative culture, including film, dramatic literature, fiction, and autobiography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 701 | Research Design and Proposal Development in Gender Studies | Prepares students for careers in gender studies by developing skills in research design, proposal writing, and identifying funding outlets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |

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| WST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| WST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 220 | Gender, Media and Culture | Introduction to gender and the media including magazines, films, advertising, new media, and other popular culture forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C | |
| WST | 276 | Wave on Wave: Survey of U.S. Women's Movements | Historical survey of sources influential in the development of the feminist movement in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| WST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 330 | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | 333 | Critical Perspectives on Sexuality | Examines critical theories of sexuality, including history, commerce, pleasure, LGBT issues, identity, medicalization of sexuality, disorders, sex crime, and pornography. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 370 | Chronicling Women's Lives | Explores the lives of a selected group of American women as a point of departure for the chronicling of contemporary women's lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 376 | Feminist Theory | Explores feminist theories and the intersection of gender, race, ethnicity, and class through critical analyses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: WST 100 or 300 with C or better |
| WST | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| WST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | 430 | Gender on the Borderlands | Examines women's status in the U.S.-Mexico borderlands through key issues such as migration, labor, violence, education, and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better; Credit is allowed for only JHR 598 (Gender on the Borderlands) or WST 430 |
| WST | 444 | Gender, Health, and Bodies | Explores gender and health from a feminist perspective, including critical analyses of medicine, science, and popular culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisites: WST 100 or 300 with C or better; Credit is allowed for only MAS 598 (Gender, Health, and Bodies) or WST 444 |
| WST | 449 | Hate Speech, Manifestos, and Radical Writings | Examines writings, speeches and texts that provoke radical or even revolutionary social change. At its core, this course asks: What is the radical and what does it do? How do radical writings function as texts, speech acts, inspirational documents, testimonies, accounts of madness, frightening moments, calls to arms, peacekeeping entities or speaking truth to power? Examines injurious speech and provocative writings that span a range of social movements and topics, including radical feminism, radical queer, Black power, indigenous rights, art and performance, anti-technology, animal rights, violence, madness and revolutionary resistance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 35 hours; Minimum 2.50 GPA; Credit is allowed for only WST 394 (Hate Speech and Manifestos) or WST 449 |
| WST | 457 | Women, Cultures, and Societies | Examines issues such as poverty, dependency, interdependency, race, class, and gender in different societies of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 467 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Latina, and Asian-American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better; Credit is allowed for only ENG 460 or WST 467 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| WST | 473 | Indigenous and Latina/Chicana Representation | Examines from an interdisciplinary perspective contemporary issues experienced by Indigenous and Chicana/Latina women in the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| WST | 475 | Women of the Diaspora across Cultures | Examines the socioeconomic condition, political formation, and identities of contemporary indigenous, ethnic minority, immigrant, and migrant women globally. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| WST | 480 | Gender Issues in Education | Examines the relationship between gender and educational access and outcomes as a result of public policy in a variety of communities and settings. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 483 | Women Writers Across Cultures | Comparative approach to contemporary writings by women from around the world. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 485 | Women, Gender, and Leadership | Explores the gendered nature of leadership and studies strategies that enable women to lead successfully in areas such as business, education, and public service. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| WST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

Spring 2016

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| AAD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AAD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AAD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| AAD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AAD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design MS student |
| AAD | 552 | Architectural Management II | Organizational, human performance, and market influences on architecture firms and projects. Readings, case studies, and analysis of managerial problems and solutions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Building Design MS, Master of Architecture, Master of Urban Design or Master of Landscape Architecture student |
| AAD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| AAD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ABS | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only ABS 130 or BIO 130 |
| ABS | 207 | Applied Plant Taxonomy | Introduces identification of vascular plants emphasizing seed plants. Surveys seed plant families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (BIO 188); BIO 182 (BIO 187) |
| ABS | 225 | Soils | Fundamental properties of soils and their relations to plant growth, nutrition of man and animals, and environmental quality. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Prerequisite(s): CHM 101 or CHM 113 |
| ABS | 226 | Soils Laboratory | Selected exercises to broaden the background and understanding of basic soil principles. Both ABS 225 and ABS 226 must be taken to secure General Studies SQ credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-Requisite: ERM (ABS) 225 |

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| ABS | 260 | Fundamentals of Sustainable Horticulture | Principles and practices of horticulture, emphasizing development, growth, and propagation of horticultural plants and environmental factors that affect these processes. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| ABS | 270 | Sustainable Biological Systems | Ecological foundations of sustainable biological systems, anthropogenic impacts on ecosystem structure and function, and ecological risk assessment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 271 | Veterinary Medicine Today | Introduces the role of the veterinarian as related to the fields of food supply and veterinary medicine. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 274 | Introduction to Wildlife Management | Managing wildlife in the Southwest, including life histories of small game, fur bearers, big game, and selected nongame specials. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |
| ABS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 302 | Ethical and Policy Issues in Biology | Policy environment and ethics in the practice of biology. Covers ethical reasoning, policy formulation, and regulatory agencies with examples from biotechnology and the environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 311 | Molecular and Cellular Biology | Overview of the biology of the cell; emphasizes structure and function of biomolecules within the cell and their applications associated with recombinant DNA technology, genetic engineering, plant and agriculture biotechnology, and human pharmaceutical development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or 188) ; BIO 182 (or 187) with C or better |
| ABS | 312 | Structure and Function | Surveys structural and functional attributes of plant and animals of particular importance in the applied biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: BIO 182 (or BIO 187) |
| ABS | 314 | Applied Plant Physiology | Understanding control of plant growth and developmental processes through innovated technologies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182 |
| ABS | 350 | Applied Statistics | Statistical methods with applications in the biological sciences and natural resource management. Uses computers and the Internet. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ASC 315, MAT 117, 142 or other course meeting General Studies MA requirement with C or better |
| ABS | 355 | Ecology and Adaptations of Vertebrates | Evolution, classification systematics, diversity, anatomical and physiological adaptations anatomy, and physiology, specializations and conservation status of the vertebrates. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 182 (or BIO187) , and BIO 181 (or BIO188) |
| ABS | 360 | Southwest Home Gardening | Multimedia course for nonmajors surveying contemporary topics in Southwest home horticulture, including landscaping, flower and vegetable gardening, citriculture, interiorscaping, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 362 | Landscape Plants | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): minimum 45 hours |
| ABS | 363 | Sustainable Landscape Practice | Landscape technologies and practices including landscape design theory, job costing and bidding, sprinkler and drip irrigation design, landscape installation, landscape valuation techniques, landscape ordinances, and maintenance practices of commercial and residential landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisites: ABS 260; Credit is allowed for only ABS or PGM 363 |
| ABS | 364 | Urban Forestry | Care, maintenance, and valuation of the urban forest, including public and private landscape codes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 368 | Plant Propagation | Theory and application of sexual and asexual propagation techniques. Considers plant materials used both for urban horticulture and ecological restoration applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 370 | Ecology | Interactions between organisms and their environments; structure and dynamics of populations, communities, ecosystems, and landscapes, with emphasis on vegetation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: BIO 181 |
| ABS | 376 | Wildlife Ecology | Examines ecological principles underlying wildlife population dynamics with emphasis on physiology, genetics, nutrition, and habitat factors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisites: ABS 274; ABS 370 |
| ABS | 378 | Animal Nutrition | Principles of nutrient metabolism in animal species; emphasizes understanding the interaction of animals with their environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 or BIO 182; CHM 101 or CHM 113 |
| ABS | 380 | Restoration and Wildlife Plants | Important wildland plants, including invasive and endangered species, wildlife food species, and species used for ecosystem restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 207 |
| ABS | 381 | Natural Resources Policy | Policies and regulations affecting management of natural resources, with emphases on wildlife and ecological restoration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 384 | Natural Resources Measurements | Inventory, sampling and monitoring techniques of natural resources. Data evaluation and interpretation as related to management, restoration and conservation needs of natural resources. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum 45 hours |
| ABS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 401 | Intermediate Statistics | Analysis of variance, multiple comparisons, multiple regression. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| ABS | 425 | Soil Classification and Management | Principles of soil genesis, morphology, and classification. Presents management and conservation practices. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ETM 225 |

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| ABS | 430 | Watershed Management | Hydrologic, physical, biological, and ecological principles applied to watershed management. Impact of ecosystem manipulations on water yield and quality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| ABS | 434 | Soil Ecology | Soils viewed in an ecosystem context, soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370 or BIO 320; Credit is allowed for only ABS 434 or BIO 418 |
| ABS | 435 | Applied Systems Ecology | Simulation modeling as a tool to study ecological processes and human impact on ecosystems and organisms. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ABS 370, ABS 350 (or STP 420) |
| ABS | 440 | Ecological Restoration Techniques | Techniques for ecological restoration, riparian and wetland restoration, and monitoring restoration success. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre/Co-requisite: ABS 370; Credit is allowed for only ETM 440 or ASB 598 (Ecological Restoration Techniques) |
| ABS | 441 | Ecological Restoration Practicum | Field experience in the evaluation and monitoring of implemented ecological restoration projects. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: ABS 440 |
| ABS | 460 | Organic Gardening | Applies principles and practices of organic gardening in the low desert, including environmental impacts of modern food production. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | |
| ABS | 462 | Greenhouse/Nursery Management | Greenhouse structures, environment, and nursery operations. Includes irrigation, nutrition, and other principles relative to production of nursery crops. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 260 |
| ABS | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 260 |
| ABS | 464 | Desert Horticulture | Students learn about and practice the principles of sustainable horticulture in an arid climate. Includes capstone projects on sustainability issues related to horticultural practice in arid environments. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ABS 260; Credit is allowed for only ABS 464 or ABS 494 (Sustainable Desert Horticulture) or ABS 498 (Desert Horticulture) |
| ABS | 470 | Life History of Mammals | Evolution, classification, environmental, anatomical and physiological adaptations, ecology, and conservation of mammals worldwide. Emphasis on the identification, habitat relationships, conservation, and management techniques of Arizona and select North American mammals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 |
| ABS | 472 | Applied Herpetology | Systematics, evolution, ecology and life history of amphibians and reptiles emphasizing wildlife management methodologies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 355 or BIO 370; Credit is allowed for only ABS 472 or 498 (Applied Herpetology) |
| ABS | 474 | Riparian Ecosystem Management | Management principles of riparian ecosystems based on fluvial geomorphological and ecological concepts. Discusses human impacts to riparian ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Minimum 45 hours |
| ABS | 475 | Habitat Management for Small Wildlife | Habitat management considerations and practices for small game and nongame wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: ABS 376 |
| ABS | 476 | Big Game Habitat Management | Habitat management considerations and practices for big game wildlife species in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum junior standing |
| ABS | 479 | Ecosystem Management and Planning | Principles of ecosystem management, with emphasis on economic and policy constraints on the planning process. Risk assessment and management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: Senior standing |
| ABS | 481 | Riparian and Wetland Restoration | Principles and problems in the restoration of degraded riparian and wetland ecosystems. Construction of wetlands. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ABS 370 |
| ABS | 482 | Ecology and Planning for Restoration | Ecological principles and resource planning processes applied to the restoration of degraded landscapes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ETM 225; 440 |
| ABS | 483 | Restoration Planning Practicum | Field experience in ecological restoration techniques, selection of mitigation techniques, and implementation planning. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | Pre/Co-requisite: ETM 482 |
| ABS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| ABS | 485 | GIS in Natural Resources | Principles of Geographic Information Systems (GIS) utilized in natural resource management. Use of computers for spatial analysis of natural resources. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: ABS 350, STP 420, EGR 280 or PSY 230 |
| ABS | 486 | Introduction to Remote Sensing | Remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. Not for graduate credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): minimum 45 hours |
| ABS | 489 | Undergraduate Research | Undergraduate research under the supervision of an applied biological sciences faculty member. | N | RSC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisite: Junior or Senior standing |
| ABS | 490 | Applied Biological Sciences Seminar | Current literature and significant developments related to applications of the biological sciences. May be repeated for credit. | N | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Senior standing |
| ABS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ABS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ABS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ABS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Prerequisite(s): minimum 45 hours |

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| ABS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ABS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| ABS | 541 | Advanced Rangeland Ecosystem Management | Combines the principles of ecology, planning and restoration in the application of rangeland ecosystem management. Studies fundamental topics such as range plant physiology, range plant ecology, rangeland stocking-rates and grazing systems in considering management practices for rangeland ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Pre-requisite: Degree-or non-degree seeking graduate; Credit is allowed for only ERM 541 or ABS 598 (Adv Rangeland Ecosystem Management) |
| ABS | 542 | Management of Fire Adapted Ecosystems | Fire adapted ecosystems which evolved with high-frequency and low-intensity fires now support a range of regimes from no fire to uncharacteristically large and intense fires, causing a concern about the current and future role of wildland fire as well as forest and rangeland health. Explores management considerations and techniques for reintroducing fire to these ecosystems. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ABS 598 (Fire Ecology), or ERM 542 |
| ABS | 550 | Vegetation Dynamics | Dynamics of vegetation linking physiological, population, and community ecology. Collection and analysis of vegetation data. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 550 | Wildlife Dynamics | Explores major concepts in population and community ecology with an emphasis on their application to the study and management of wildlife species. Explores the theory and sometimes controversial nature of these concepts in the form of lectures and discussions. Instructor and student workshops and oral presentations of student research. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ERM 550 ABS 598 (Wildlife Dynamics) or ETM 598 (Wildlife Population Ecology) |
| ABS | 551 | Advanced Environmental Analysis | Advanced statistical procedures and experimental design for the biological sciences. Techniques for analyzing data that do not meet statistical assumptions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 553 | Riparian Ecology | Review of recent literature, developments, and methods related to riparian ecology. Applies soil and landscape ecology to riparian systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate (Degree and non-degree) students; Credit is allowed for only ABS, BIO 560 or MAT 561 |
| ABS | 570 | Advanced Animal Nutrition | Metabolic and physiological interactions of nutrients in wild and domesticated animals consuming natural feeds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 586 | Remote Sensing in Environmental Resources | Principles and application of remote sensing technologies in natural resource management using computerized data from aerial photography and satellite imagery. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ABS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ABS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 101 | Accountancy LEAP Program | The Leadership, Ethics, Accountability & Professionalism (LEAP) program aims to ensure a successful transition from high school to college and, ultimately, one's career. Based on the hallmarks of the accounting profession, provides the tools, resources, and expectations to succeed at ASU, W.P. Carey School of Business and the School of Accountancy. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1 | | |
| ACC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-3 | | |
| ACC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 231 | Uses of Accounting Information I | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: CIS 105 (or CIS 236) or CSE 110 if Engineering Management major. Not open to Pre-BIS or Interdisciplinary Studies majors |
| ACC | 232 | Financial Accounting I | Develops an understanding of the theory, concepts, principles and practices underlying preparation, interpretation, and use of external financial reports. Emphasizes interpreting the economic substance of events and transactions and their association with contemporaneous and prospective events, relationships, and outcomes. Gains understanding of the accounting information model and develops an ability to analyze and record business transactions and analyze basic financial statements. Meant for prospective accounting and finance majors (and students who plan current majors in these areas) and develops skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Accountancy or Finance majors; CIS 105, 220 or 236 with C or better |
| ACC | 241 | Uses of Accounting Information II | Introduces the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): ACC 231, 261, or 303 with C or better |
| ACC | 242 | Managerial Accounting I | Develops an understanding of the theory, concepts, principles, and practices underlying managerial accounting. Emphasizes three functions managers must perform within their organizations: plan operations, control activities, and make decisions. Explains what accounting information is necessary, how to collect it, and how to interpret it. Meant for prospective accounting and finance majors and students who plan current majors in these areas and develop skills and abilities facilitating success in higher-level accounting courses. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Open to W. P. Carey Accountancy and Finance majors, and others with School of Accountancy approval; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 261 | Honors Fundamentals of Financial Accounting | Covers basic financial accounting concepts and applications. Develops an understanding of the environment in which financial reporting choices are made. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; CIS 105 or CIS 220 or CIS 236 with C or better |
| ACC | 271 | Honors Fundamentals of Managerial Accounting | Covers basic managerial accounting concepts and applications. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student; ACC 231, ACC 232, ACC 261 or ACC 303 with C or better |
| ACC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 340 | External Reporting I | Financial accounting theory and practice related to external reporting. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W.P. Carey Accountancy BS or Finance BS student; Pre- or corequisite(s): FIN 300, 302 or 303 |
| ACC | 350 | Internal Reporting | Internal reporting systems for planning, control, and decision making. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 241, ACC 242 or ACC 271, AND ECN 221 or ECN 231 with C or better |
| ACC | 360 | Ethics for Professional Accountants | Addresses ethical obligations and responsibilities of professional accountants. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s) with C or better: ACC 241, 242 or 271; ECN 221 or 231; MAT 211, 266 or 271; W. P. Carey BS Accountancy major |
| ACC | 382 | Accounting and Financial Analysis | Introduces nonbusiness majors to financial accounting concepts related to operating, financing, investing, and ethical decisions. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: Non-Business student; must not have previously earned credit in ACC 230, 231, 232, 240, 241, 242, 261, 271 or BUA 381; min ASU cum GPA of 2.00 and min 56 total earned hours OR non-deg student with min ASU cum GPA of 2.00, OR grad student |
| ACC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | |
| ACC | 430 | Taxes and Business Decisions | Federal income taxation of sole proprietors, partnerships, corporations, fiduciaries, and individuals with an emphasis on tax consequences of business and investment decisions. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): W. P. Carey Accountancy BS student; ACC 340 with C or better; LES 305 with C or better |

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| ACC | 440 | External Reporting II | Continuation of ACC 340 with emphasis on the recognition, research, and resolution of financial reporting issues. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Finance BS student; ACC 340 with C or better |
| ACC | 444 | Enterprise Process Analysis and Design | Addresses the major business processes of an enterprise, the impact of recent technological innovations and requisite internal controls. Advances an understanding of the current regulatory environment as it pertains to process controls. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Computer Info Systems BS student; ACC 241(or 242 or 271) with C or better; ECN 221 with C or better; FOR CIS MAJORS: CIS 235 or 236 with C or better |
| ACC | 445 | Honors Enterprise Process Analysis and Design | Analysis and design of efficient and effective business processes. Emphasizes taking advantage of new information technologies to improve managerial decision making. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey School of Business Honors student AND Accountancy BS or Computer Info Systems BS student; ACC 241, 242 or 271 with C or better; ECN 221 or 231 with C or better |
| ACC | 450 | Principles of Auditing | Standards and procedures in auditing. Planning, evidence gathering and accumulation, and reporting. Ethical and legal considerations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisites: W. P. Carey Accountancy BS student; ACC 440 with C or better |
| ACC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisites: W. P. Carey BS Accountancy major; 3.50 cumulative GPA; Minimum 72 hours; ACC 340, 350, 430, 440 and 450 with C or better |
| ACC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | School of Accountancy | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ACC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Accountancy BS student |
| ACC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-7 | L | Pre-requisite: Accountancy BS, Finance BS or Economics BS student |
| ACC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-3 | | Pre-requisite: Accountancy BS student |
| ACC | 502 | Financial Accounting | Contemporary financial accounting and reporting systems; emphasizes the interpretation and evaluation of a company's external financial reports. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 503 | Managerial Accounting | Managerial accounting concepts and procedures for internal reporting applied to the decision making activities of the professional managers. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: MBA student |
| ACC | 511 | Taxes and Business Strategy | Economic implications of selected management decisions involving application of federal income tax laws. Recognition of tax hazards and tax savings. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 512 | Advanced Auditing | Builds on the skills obtained in the beginning auditing (assurance) course and focuses on audit planning, risk assessment, evidence, and reporting procedures and fraud. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Master of Accounting student |
| ACC | 513 | Advanced Financial Accounting | Focuses on advanced financial accounting topics along with their application in the financial reporting process. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 571 | Taxation of Corporations and Shareholders | Tax aspects of the formation, operation, reorganization, and liquidation of corporations and the impact on shareholders. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 573 | Taxation of Pass-Through Entities | Tax aspects of the definition, formation, operation, liquidation, and termination of a partnership. Emphasizes tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 575 | Family Tax Planning and Wealth Transfer Taxation | Tax treatment of wealth transfers at death and during lifetime, with emphasis on tax planning. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 577 | Tax Research, Professional Responsibilities & Property Transactions | Federal tax issues and consequences, tax authority, property transactions and tax consequences of acquiring, holding and disposing of property. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major. Credit is allowed for only ACC 577 or ACC 591 (Tax Research, Professional Responsibilities & Property Transactions) |
| ACC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 582 | Information Security of Interorganizational Systems | Function and responsibility of the information security officer. Advanced topics in security methods and technology. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 585 | Performance Measurement and Advanced Managerial Accounting | Applies quantitative techniques to accounting problems. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: Business Graduate student |
| ACC | 586 | Shareholder Value Creation and Financial Statement Analysis | Develops skills necessary to exploit financial reporting information in a business environment and appreciation of reporting issues faced by management. | N | LEC | N | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |

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| ACC | 587 | Multi-Jurisdictional Taxation I | Multistate taxation and interplay between multistate tax issues and federal and state constitutional limitations. | N | LEC | N | GNA | W.P. Carey School of Business | School of Accountancy | 3 | | Prerequisite(s): Master of Taxation major |
| ACC | 588 | Professional Accounting Research | Applies the technical knowledge of accounting theory and principles developed in other academic courses through the use of "real life" case studies, where such knowledge and professional judgment is applied in resolving advanced accounting problems and issues. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Accountancy student |
| ACC | 589 | Multijurisdictional Tax II | Addresses the U.S. taxation of U.S. individuals and businesses that do business outside the U.S. as well as the U.S. taxation of foreign persons and tax treaties, allocation of income, foreign tax credits, and transfer pricing. Emphasizes planning related to some of the tax issues that commonly arise in cross-border businesses. | N | RSC | N | OPT | W.P. Carey School of Business | School of Accountancy | 3 | | Pre-requisite: W. P. Carey Master of Taxation student |
| ACC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-4 | | Pre-requisite: Specific Business Graduate majors |
| ACC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | School of Accountancy | 1-12 | | Pre-requisite: Business Administration (Accountancy) PHD student |
| ACC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ACC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | School of Accountancy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | School of Accountancy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | School of Accountancy | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ACO | 100 | All About Data: Design, Query, and Visualization | Data modeling and design, spreadsheets, relational databases and querying, visualization and XML. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | |
| ACO | 101 | Introduction to Computer Science | Concepts of problem solving, structured and object-oriented programming in Java, fundamental algorithms, computer system concepts. Social and ethical responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s): MAT 117 with C or better OR Mathematics Placement Test with a score of 50% or higher |
| ACO | 102 | Object-Oriented Programming | Object-oriented programming using introductory algorithms and data structures. Overview of concepts in computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 101 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| ACO | 201 | Data Structures and Algorithms | Static and dynamic data structures, recursive and iterative sorting and searching, object-oriented design and programming, software design models and implementation/testing strategies, professional responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: ACO 102 and MAT 210 with C or better |
| ACO | 210 | Introduction to Systems Programming | Introduces operating systems as resource managers, processes, threads, memory allocation, file systems, protection, system calls, application program interfaces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisite: ACO 201 with C or better |
| ACO | 220 | Introduction to Database Systems | Introduces database management systems concepts. Entity-relationship and relational data models. Database design. Relational algebra, calculus, and SQL query languages. Query optimization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 210; MAT 243. Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| ACO | 320 | Database Systems | Entity-relationship and relational data models. Database design theory. Relational algebra, calculus and SQL query languages. Query optimization. XML fundamentals. Transactions, recovery and concurrency control. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 210 with C or better; MAT 243 with C or better; Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| ACO | 321 | Database Development & Applications | Stored procedures and triggers. Security and authorization. Call-level interface. Database Web applications. Advanced topics. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 320 with C or better. Credit is allowed for only ACO 321 to CSE 414 |
| ACO | 330 | Computer Networks | Network architecture and protocols, principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ACO 210 with C or better. Credit is allowed for only ACO 330 or CSE 434 |
| ACO | 331 | Network Design | Fundamental network design principles, internetworking design, network architectures, network management, traffic analysis, security management, case study and hands-on experiments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 330 with C or better |
| ACO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | N | RSC | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Prerequisite(s): ACO 102; minimum 30 hours |
| ACO | 420 | Large-scale Data Management | Modern technologies to manage, process and analyze big data. Data processing of large data sets with Map/Reduce. NoSQL data stores. NewSQL databases. Data visualization. Applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 421 | Data Mining and Warehousing | Introduces data mining from a database perspective, including classification, clustering, and association rules. Data warehousing methodologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 422 | XML and Databases | XML data model, schema specification and validation, querying, storage, indexing, and current research topics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: ACO 320 with C or better |
| ACO | 430 | Wireless Networks | Wireless transmission fundamentals, multiple access techniques, error detection and control, cellular concepts and systems, wireless LAN, performance analysis, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and STP 300 with C or better |
| ACO | 431 | Network Security | Digital threats and attacks, cryptography, confidentiality, authentication protocols, message integrity, security in network applications, intrusion detection, malicious software countermeasures, firewalls. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210, ACO 330 and MAT 243 with C or better |
| ACO | 432 | Distributed Systems | Distributed system models, distributed programming technique, clock synchronization, distributed snapshot, distributed mutual exclusion, concurrency control, fault tolerance, security, recent advances. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 210 and ACO 330 with C or better |
| ACO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ACO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ACO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ACO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| ACO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | L | |
| ACO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| ACT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 201 | Introduction to Elements and Techniques of Actuarial Science | Introduces important aspects of actuarial work. Exposes the development of actuarial techniques in the context of life insurance, casualty and property insurance, superannuation and investment. Develops problem-solving skills and gives basic tools for risk management and financial modeling, including the use of Excel spreadsheets for both, calculations and simulations. Shows how studies in related disciplines (such as accounting, demography, economics, statistics, computing and mathematics) are essential to the education of an actuary. Guest speakers from the industry share their knowledge and insight on how to become a successful actuary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: CIS 105 and MAT 270 with B or better |
| ACT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 310 | Mathematics of Finance | Prepares potential actuaries to master national exams. Provides an understanding of the fundamental concepts of financial mathematics and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use in: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting and valuing contingent cash flows. Topics include: mathematics of compound interest including annuities certain, amortization schedules, yields curves, sinking funds and bonds. Gives an introduction to financial instruments including derivatives and the concept of no-arbitrage as it relates to financial mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | | Pre-requisite: ACT 201 with B or better; MAT 270 with B or better; Credit is allowed for only ACT 310 or MAT 340 |
| ACT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 415 | Probability for Risk Management | Prepares potential actuaries to master national exams. Develops knowledge of the fundamental probability tools for quantitatively assessing risk. Topics include: introduction to probability concepts including definition of probability, independence, conditional probability, random variables, specific discrete and continuous probability distributions, multivariate random variables, moments and moment generating functions, functions of random variables, sampling distributions and central limit theorem. Emphasizes the application of these tools to problems encountered in actuarial science. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: ACT 201; MAT 272; Credit is allowed for only ACT 415 or STP 326 |
| ACT | 430 | Mathematics of Financial Derivatives | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. Topics include: option pricing, Black-Scholes formula, delta hedging, exotic options, Brownian motion, interest rate models and simulations. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 310 with B or better |

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| ACT | 435 | Actuarial Business Forecasting | Business forecasting using statistical techniques such as: simple linear regression, multiple linear regression, hypothesis testing and confidence intervals in linear regression models, testing of models, data analysis and appropriateness of models, linear time series models, moving average, regression based and/or ARIMA models, estimation, data analysis and forecasting with time series models, forecast errors and confidence intervals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 342 or 343 with B or better; STP 420 with B or better |
| ACT | 440 | Life Contingencies I | Prepares potential actuaries to master the national exams. Develops knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: life tables, present value determination for life insurances and annuities, benefit premiums and reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 415 with B or better; MAT 343 with B or better |
| ACT | 441 | Life Contingencies II | Prepares potential actuaries to master the national exams. Develop the student's knowledge of the theoretical basis of life-contingent actuarial models and the application of those models to insurance and other financial risks. Topics include: multiple life functions, multiple decrement models and benefit reserves. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 440 with C or better |
| ACT | 450 | Actuarial Models and Modeling I | Prepares potential actuaries to master the national exams. Helps student understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: survival, severity, frequency and aggregate models and their modifications. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: ACT 415; STP 427 |
| ACT | 451 | Actuarial Models and Modeling II | Prepares potential actuaries to master the national exams. Helps students understand the steps involved in the modeling process and how to carry out these steps in solving business problems. Students analyze data from an application in a business context, determine a suitable model including parameter values and provide measures of confidence for decision making based upon the model. Topics include: construction and selection of parametric models, Bayesian estimation, credibility and simulation. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): ACT 450 with C or better |
| ACT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| ACT | 491 | Actuarial Exam Preparation Seminar | Provides potential actuaries with review and practice for an actuarial examination. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s) with B or better: ACT 310 (or ACT 415 or 430 or both ACT 440 and 441 or both ACT 450 and 451) |
| ACT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| ACT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| ACT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| ADE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 242 | Introduction to Building Systems | Materials and methods of construction. Aesthetic, code and construction costs. Exposure to building information management (BIM). | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Architectural Studies major; Co-requisite: ALA 226. Credit is allowed for only ADE 242 or ATE 294, Building Systems |
| ADE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 321 | Architectural Studio I | Introductory building design problems. Emphasizes design process, communication methods, aesthetics, construction, and technology. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architecture student; ALA 226 with C or better |
| ADE | 322 | Architectural Studio II | Site and building design problems. Emphasizes programmatic and environmental determinants and building in natural and urban contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 321 with C or better |
| ADE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 421 | Architectural Studio III | Topical design problems of intermediate complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: ADE 322 with C or better; Co-requisites: APH 421, ATE 451 |

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| ADE | 422 | Architectural Studio IV | Topical design problems of advanced complexity, including interdisciplinary problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Architectural Studies student; ADE 421 with C or better |
| ADE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ADE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ADE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ADE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ADE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| ADE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ADE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture, Master of Landscape Architecture, or Master of Urban Design |
| ADE | 510 | Foundation Architectural Studio | Fundamentals of architectural design, methodology, visualization, and representation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 511 | Core Architectural Studio I | Applies design fundamentals in architectural problems, including construction, technology, programmatic and environmental determinants. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 510 with C or better |
| ADE | 512 | Core Architectural Studio II | Applies architectural design fundamentals to increasingly complex problems, including specific sites and activities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 6 | | Pre-requisites: Master of Architecture student; ADE 511 with C or better |
| ADE | 521 | Advanced Architectural Studio I | Design problems emphasizing theory, aesthetics, and tectonics as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; Co-requisite: ATE 553 and ATE 563 |
| ADE | 522 | Advanced Architectural Studio II | Design problems emphasizing the comprehensive integration of building systems and technologies as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 521 with a C or better; Co-requisites: APH 505 and ATE 556 |
| ADE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | PRA | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 621 | Advanced Architectural Studio III | Design problems emphasizing the urban context, planning issues, and urban design theory as influences on architectural form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better; Co-requisite: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |

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| ADE | 622 | Advanced Architectural Studio IV | Individual, student-initiated project reflecting a culminating synthesis of architectural ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisites: Master of Architecture student, ADE 522 with a C or better; Co-requisites: APH 515 OR Bldg Des(Energy Perform/Bldgs) MS student |
| ADE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ADE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| AEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 313 | Aircraft Dynamics and Control | Aircraft static stability; equations of motion; dynamic modes and stability; stability derivatives; response to controls; introduces automatic control of aircraft. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 301 and 318 with C or better |
| AEE | 325 | Aerospace Structures and Materials | Applies structural analysis to aircraft and spacecraft structures. Loads on aerospace structures, buckling and stability, stiffened panels, primary wing and launch-vehicle structure, vibration of large structures, properties and selection of aerospace structural materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisites with C or better: Aerospace Engr major: MAE 213 & 384; MAT 267 or 272, OR Mat Sci & Engr major: MSE 211 & 415 (or 315); MAT 267 or 272; Credit is allowed for only AEE 325 (or MAE 325), MEE 322, or MAE 394 (Structural Materials in Aerospace) |
| AEE | 344 | Fundamentals of Aircraft Design | Aircraft performance, RFP's, Federal Aviation Regulations, aircraft sizing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 214 and 384 with C or better; Pre- or corequisite(s): AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better if completed |
| AEE | 360 | Aerodynamics | Airfoils and wings, ideal flow, boundary layers, finite-difference solutions, wind-tunnel testing. Both AEE 360 and AEE 362 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; ENG 102, 105, or 108 with C or better; MAE 240 and 384 with C or better; MAT 267 or 272 with C or better |
| AEE | 362 | High-Speed Aerodynamics | Compressible flow at subsonic and supersonic speeds; ducts, nozzles, and diffusers; normal and oblique shocks, transonic flow, numerical solutions; experimental applications. Both AEE 362 and AEE 360 must be taken to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | L | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) with C or better; MAE 384 with C or better |
| AEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 415 | Vibration Analysis | Free and forced response of single and multiple degree of freedom systems, continuous systems; applications in mechanical and aerospace systems numerical methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 318 and 384 with C or better; Credit is allowed for only AEE 415 or MAE 598 (Vibration Analysis) |
| AEE | 426 | Design of Aerospace Structures | Flight vehicle loads, design of semimonocoque structures, local buckling and crippling, fatigue, aerospace materials, composites, joints, and finite element applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Aerospace Engineering BSE major; AEE 325 (or MAE 325) or MAE 394 (Aerospace Structures and Materials) with C or better; Credit is allowed for only AEE 426 or MAE 598 (Design of Aerospace Structures) |
| AEE | 445 | Fundamentals of Spacecraft Design | Spacecraft subsystems. Systems engineering, space mission design, space environment. Cost analysis. Risk and reliability analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 325 (or MAE 394 Aerospace Structures and Materials) with C or better; MAE 214 and 318 with C or better; Credit is allowed for only AEE 445 or MAE 494 (Fundamentals Spacecraft Dsgn) |
| AEE | 462 | Space Vehicle Dynamics and Control | Attitude dynamics and control, orbital mechanics, orbital transfer/rendezvous, spacecraft control systems design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 301 and 318 with C or better |
| AEE | 463 | Aircraft Propulsion | Fundamentals of gas-turbine engines. Analysis and design of components. Alternative aircraft propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 362 with C or better; MAE 384 with C or better |
| AEE | 465 | Rocket Propulsion | Rocket flight performance; nozzle design; combustion of liquid and solid propellants; component design; advanced propulsion systems; interplanetary missions; testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 or MAE 362 with C or better; MAE 462 with C or better |
| AEE | 466 | Rotary Wing Aerodynamics and Performance | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 with C or better; Credit is allowed for only AEE 466 or MAE 566 |
| AEE | 468 | Aircraft Systems Design | Group projects related to aircraft vehicle design, working from mission definition and continuing through preliminary design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 313 and 344 with C or better; MAE 400 with C or better; Pre- or corequisite(s): AEE 463 with C or better if completed |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AEE | 469 | Projects in Astronautics or Aeronautics | Various multidisciplinary team projects available each semester. Projects include design of high-speed rotorcraft autonomous vehicles, liquid-fueled rockets, microaerial vehicles, satellites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |
| AEE | 471 | Computational Fluid Dynamics | Numerical solutions for selected problems in fluid mechanics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 or MEE 340 with C or better; MAE 384 with C or better; Credit is allowed for only AEE 471 or MAE 561 |
| AEE | 478 | Fundamentals of Autonomous Aircraft Systems | First of a two-semester capstone sequence. Introduces autonomous aircraft performance and operations, aircraft performance prediction, ground control and support, sensors, communications and telemetry, aerospace ethics and law, design methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s) with C or better: AEE 313, 360 |
| AEE | 479 | Design of Autonomous Aircraft Systems | Interdisciplinary capstone design project for aerospace and electrical engineering students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: MAE 400 with C or better; AEE 478 with C or better |
| AEE | 480 | Space Systems Design | Group projects related to space systems design, working from mission definition and continuing through conceptual design. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 445 (or MAE 445) with C or better; EEE 350 with C or better; MAE 214 with C or better; Pre- or corequisite(s): AEE 465 (or MAE 465) with C or better if completed |
| AEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| AEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| AEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| AEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| AEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| AEP | 501 | Practical and Professional Ethics | Acquaints students with practical and professional ethics. Assumes no prior experience in ethics, and provides practicable knowledge as well as theoretical knowledge. The first in a series of courses for the MA program in Applied Ethics and the Professions, the course is primarily intended to prepare students in that degree program for their subsequent courses. However, it has been designed to be useful to all graduate students who are interested in learning about practical and professional ethics. The beginning of the course is devoted to the more general subjects of practical ("everyday") ethics and professional ethics, while the remaining weeks are spent focusing on the ethical issues that occur in the context of specific professions, with particular emphasis given to those professions that seem most relevant to the aspirations and interests of the students enrolled in the course. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): graduate student or Barrett Honors student |
| AEP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AEP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AEP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AES | 101 | Air Force Today I | Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 102 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes common Air Force customs and courtesies, drill and ceremonies, health and physical fitness through group participation. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 101 |
| AES | 103 | Air Force Today II | Introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: introduction to leadership, Air Force core values, introduction to interpersonal communication and team building, and a continuation of communication skills. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 104 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes learning the environments and dynamics of an Air Force officer. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 103 |
| AES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AES | 201 | The Evolution of USAF Air and Space Power I | Focuses on facilitating the transition from Air Force ROTC cadet to Air Force ROTC candidate. Examines the general aspects of air and space power through a historical perspective. Utilizing this perspective, covers a time period from the first balloons and dirigibles to the modern technology currently used in overseas contingency operations. Featured topics include: Air Force heritage, Air Force leaders, introduction to ethics and values, group leadership problems and continuing application of communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |

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| AES | 202 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Provides application of advanced drill and ceremonies; issuing commands; knowing flag etiquette; and developing, directing, and evaluating skills to lead others. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 201 |
| AES | 203 | The Evolution of USAF Air and Space Power II | Provides knowledge-level understanding for general element and employment of air and space power. Furthermore, discusses the importance of Air Force Core Values with use of operational examples and historical Air Force leaders. Continues to develop communication skills. Topics include: the Air Force mission and organization, modern joint expeditionary Airmen, officer opportunities, and professionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 2 | | |
| AES | 204 | Leadership Lab | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes preparation for field training. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 203 |
| AES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-4 | | |
| AES | 301 | Air Force Leadership Studies I | Study of communication skills, leadership and quality management fundamentals, leadership ethics, and professional knowledge required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 302 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experiences applying leadership and management principles to motivate and enhance the performance of other cadets. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 301 |
| AES | 303 | Air Force Leadership Studies II | Continuation of AES 301. Topics include: communication skills, ethics, leadership, professional knowledge, and quality management required of an Air Force officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 304 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes planning the military activities of the cadet corps and applying advanced leadership methods. | N | LAB | Y | YGB | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 303 |
| AES | 401 | National Security Affairs | Examines advanced ethics, Air Force doctrine, national security process, and regional studies. Special topics include: civilian control of the military, military justice, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | L | |
| AES | 402 | Leadership Laboratory | Dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Advanced leadership experience demonstrating learned skills in planning and controlling the military activities of the corps. | N | LAB | Y | GNA | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | Co-requisite: AES 401 |
| AES | 403 | Preparation for Active Duty II | Continuation of AES 401. Topics include: civilian control of the military, doctrine, ethics, military justice, the national security process, and officership. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 3 | | |
| AES | 404 | Leadership Lab | Continuation of AES 402 with emphasis on preparation for transition from civilian to military life. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 0 | | |
| AES | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Aerospace Studies | 1-7 | L | |
| AES | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-3 | | |
| AES | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Aerospace Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 210 | Measurements and Testing | Measurement systems, components, system response, and the characteristics of experimental data. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 112; Pre/Corequisite(s): MAT 266 |
| AET | 215 | Aircraft Systems | Principles and design features of aircraft structures, systems, and materials. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| AET | 300 | Aircraft Design I | Applied aerodynamics, standard atmosphere, speed measurement, infinite and finite wings, airplane performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: AET 215; MET 211, ECE 210, or MAE 212 |

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| AET | 415 | Gas Dynamics and Propulsion | Introduces compressible flow, internal and external flow, and aerothermodynamic analysis of propulsion systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): AET 300; MET 340 or MAE 340 or Fulton Schools of Engineering graduate student |
| AET | 417 | Aerospace Structures | Analysis and design of aircraft and aerospace structures. Shear flow. Semimonocoque structures. Effects of dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MET 213, MET 313 (or ECE 313); MET 212, AET 312 (or ECE 312); AET 300 |
| AET | 420 | Experimental Aerodynamics and Wind Tunnels | Experimental applied aerodynamics related to aeronautical and mechanical design. Wind tunnel design and testing. Low speed flows. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: AET 300; MET 340 |
| AET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AET | 524 | Application of Heat Transfer | Energy conservation, steady-state and transient conduction, convection transfer, free and forced convection Reynolds analogy, blackbody and environmental radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 432 or MAE 340; Credit is allowed for only AET 524 or AET 432 |
| AET | 525 | Advanced Propulsion | Mechanics and thermodynamics of propulsion systems. Solid, liquid propellant rocket design performance. Electrical nuclear propulsion systems. Space missions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 434, AET 415 or MAE 340 |
| AET | 560 | Numerical Methods in Engineering Technology | Analyzes problems in physical sciences, models physical problems, perturbation techniques, curvefitting, data analysis, numerical solutions, ordinary and partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Engineering students; Senior or higher academic level |
| AET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 191 | First Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AFR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 200 | Introduction to Africana Studies | Introduces the study of African and African-descended peoples; theory, themes, and perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | |
| AFR | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| AFR | 210 | Introduction to African American Studies | Examines the political, historical, and cultural origins of African American studies as an academic discipline. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | |
| AFR | 212 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |

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| AFR | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |
| AFR | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |
| AFR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 300 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |
| AFR | 301 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| AFR | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| AFR | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present, looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |
| AFR | 305 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| AFR | 310 | African/African American Psychology | In-depth study of the historical development of African and African American psychology. Course will critically examine the African American frame of reference as well as examine African and African American psychology from a contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 312 | Contemporary African and African Diaspora Women | A critical analysis of recent literary, theoretical, and methodological themes concerning the study of African and African Diaspora women. Particular study will focus on the historical impact these themes have had on the phenomena of transformation by various African and African Diasporan women's populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 317 | Genes, Race and Society | An in-depth examination of the biological and social construction of race in western societies. Special emphasis is placed on examining these constructs from a historical perspective | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 318 | African and African Diaspora Women Writers | Intersection of race, class, gender, and ethnicity in black women's fiction from the United States, the Caribbean, and Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| AFR | 320 | Africa: Politics, Environment, and Development | An in-depth analysis of the African experience as a way to understand the consequences of human environment relationships, wealth and power differentials, and individual and global citizenship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |

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| AFR | 325 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| AFR | 327 | Human Rights in Africa | In-depth study of the development of African organizations and instruments engaged in the dynamic processes of conceptualizing human rights that reflect its particular histories. It will also assess the effectiveness and appropriateness of efforts to address the human rights abuses and violations found in Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| AFR | 331 | Studies in African American Women Writers of Pre-Harlem Renaissance | In depth analysis and advanced comparative study of novels, short stories, essays, speeches, and dramas that gave voices to African American woman in the pre-Harlem Renaissance era. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) and ENG 101 or 105 or 107 with C or better OR ENG 101 or 105 or 107 with C or better and minimum 45 hours |
| AFR | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| AFR | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AFR | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| AFR | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and Africans Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| AFR | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| AFR | 340 | The Making of Modern Africa | Advanced study of the events and processes leading up to the colonization of Africa and the subsequent changes in African societies under colonial rule and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| AFR | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| AFR | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| AFR | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| AFR | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |

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| AFR | 355 | Democracy and Civil Society in Africa | Advanced examination of contending perspectives on the state and civil society of Africa. Course will specifically analyze the democratic struggles in sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 360 | Black Families in the Diaspora: U.S. and Caribbean | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| AFR | 363 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| AFR | 364 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AFR | 364 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| AFR | 365 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 365 (or AFH 364) or WST 364 |
| AFR | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Places special study on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| AFR | 370 | Family, Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| AFR | 372 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| AFR | 373 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| AFR | 375 | Race, Gender and Sport | Advanced and interdisciplinary examination of the social concepts of race and gender and their economic impact on sports in America. In-depth studies will focus on the role of regulatory agencies, the impact of these regulatory agencies have on sport as well as multiple legal issues surrounding athletics | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours |
| AFR | 380 | Health Issues in the African American Community | In-depth examination and discussion of African American health across the lifespan. Discusses the factors associated with disparities in health and healthcare. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 380 (or AFS 380) or 394 (Hth Issues Af/Am Community) |
| AFR | 383 | Blacks in Science, Medicine and Public Health | In-depth study of Blacks who have made significant contributions to science and medicine in the U.S. Begins with a critical examination of ancient African scientific contributions. Highlights specific individuals, analyzing their life's path to their respective careers. Also discusses the role of racism and discrimination and their efforts to overcome these. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 383 (or AFS 383) or AFS 394 (Blacks in Science, Medicine, and Public Health) |
| AFR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 418 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| AFR | 420 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |

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| AFR | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| AFR | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |
| AFR | 460 | Race, Gender and Media | Reading seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |
| AFR | 465 | Harlem Renaissance: a Cultural History: 1877-1945 | Socio-political, historical contexts and worldwide ramifications of the cultural productions (theater, music, visual arts, and literature) of the Harlem Renaissance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| AFR | 466 | Peoples and Cultures of Africa | An in-depth study of the diversity of African people and culture from an interdisciplinary perspective. Emphasizes social, political, and economic relations, as well as inequality, art, gender roles, slavery, and slave trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| AFR | 470 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| AFR | 480 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| AFR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| AFR | 490 | Field Studies in the Diaspora | Introduces methods and principles of research applied to Black communities within and outside Arizona. Involves working with field officer and faculty. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | |
| AFR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AFR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| AFR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| AFR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Prerequisite(s): 9 upper-division hours, or AFR 200 (or AFS 200) and minimum junior standing |
| AFR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| AFR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AFR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AFR | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AFR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 100 | Introduction to Agribusiness | Overview of agribusiness industries and career opportunities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 302 | International Management and Agribusiness | Management and agribusiness issues in the transition of developing countries from subsistence to global operations and competition. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | G | Prerequisite(s): ECN 212 or 214 with C or better; Credit is allowed for only AGB 302 or MGT 302 or BUA 394 (Perspectives in Global Business) |
| AGB | 321 | Agribusiness Marketing | Focuses on food and consumer products marketing at an intermediate level. Covers strategic concepts such as situational analysis, planning and objectives, and target marketing and positioning. Illustrates both the theory and application of strategic decision making through case analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 333 | Agribusiness Finance | Introduces financial markets and institutions. Interest rate determination, money and banking, equity markets, farm credit system, vendor financing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): ACC 231 |
| AGB | 340 | Food Processing | Introduces processed food quality assurance, statistical sampling, and inspection procedures. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 360 | Agribusiness Statistics | Statistical methods with applications in agribusiness and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | CS | |
| AGB | 366 | Agribusiness Production Technologies | Examines methods for managing diverse crop and livestock enterprises with an emphasis on growth, development, marketing, and loss prevention. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 367 | Agribusiness Processing Technologies | Biotechnology and other methods used in the production, processing, and distribution of food. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 410 | Agribusiness Management | Principles of human resource management in agribusiness firms. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 100 |
| AGB | 414 | Agribusiness Analysis | Analysis of agribusiness firm decisions in the ecological, economic, social, and political environments. Special emphasis on ethical issues surrounding food production and consumption. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | L | Prerequisite(s): Minimum 87 hours; AGB 321 and 333 |
| AGB | 420 | Food Advertising and Promotion | Focuses on advertising and promotional strategies in the food industry, with an emphasis on the Consumer Packaged Goods (CPG) industry. Recommended proficiency in the computer applications used in this class: word processing, spreadsheets, graphics, presentations, and the Internet. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, MKT 300, 302, 303 or TMC 310 (BUA 382) |
| AGB | 422 | Consumer Behavior | Applies behavioral concepts in analyzing consumer food purchases and their implications for marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300, or TMC 320 |
| AGB | 424 | Agribusiness Sales | Principles and techniques of selling and merchandising in the agricultural and food industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 425 | Food Supply Networks | Methods, resources and information used to store and deliver food products in a global market. Supplier and customer perspectives help students understand what it takes to develop competitive advantage through distribution and logistics in a global marketplace. Emphasizes food supply network complexities and system design that helps develop critical thinking skills students will be able to use in any area of business. Practicum section with field trips to major food business firms, governmental organizations and industry associations located in metro Phoenix and Nogales area. | N | LEC | N | GNA | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: AGB 321, FIN 300, or TMC 320 |
| AGB | 429 | Marketing Research | Examines the marketing research process and its role in facilitating agribusiness decisions. Emphasizes problem identification, survey design, and data analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: AGB 321 and MKT 300 with C or better. |
| AGB | 431 | Agribusiness Financial Management | Comprehensive treatment of topics in financial management of agribusiness: capital structure, dividend policy, asset valuation, mergers and acquisitions, risk management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321, FIN 300 or TMC 320 |
| AGB | 433 | Agribusiness Financial Markets | Role and function of agribusiness in U.S. financial system. Topics include rural banking, farm credit system, monetary policy, and federal reserve. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 333 or FIN 300 |

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| AGB | 434 | Agricultural Risk Management and Insurance | Strategies to manage agricultural price and business risk: derivatives, insurance, self-insurance, and public policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 435 | Commodity Futures and Options Markets | Provides an understanding of how to use futures and options markets in a risk management and pricing context, especially as it pertains to the marketing and procurement of agricultural commodities by grain and livestock merchandisers, food manufacturers, and producers/distributors/consumers of natural resources. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 440 | Food Safety | Control, prevention, and prediction of microbial and chemical food-borne diseases. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 445 | Food Retailing | Food retail management. Discusses trends, problems, and functions of food retail managers within various retail institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): AGB 321 or TMC 310 (BUA 382) or MKT 300 or MKT 302 or MKT 303 |
| AGB | 452 | International Agricultural Policy | Use of international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| AGB | 454 | International Trade | International practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: AGB 302 |
| AGB | 456 | Food Product Innovation and Development | The food product development process and how it interfaces with food technology and packaging concepts. Emphasizes the team approach, which is prevalent in the food industry. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): senior standing |
| AGB | 481 | Microeconomic Analysis of Food Markets | By applying the basic concepts of microeconomics to real-world data, this course allows the student to not only gain a book-oriented understanding of how businesses in the food industry behave, but practical, hands-on experience that lasts far beyond the classroom. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisite: ECN 212 or BUA 294: Microeconomics for Agro-Food / Resources or BUA 294: Economic Theory in Agro-Food / Resources |
| AGB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | | Prerequisite(s): Barrett Honors student |
| AGB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AGB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| AGB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | L | |
| AGB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-3 | | |
| AGB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| AGB | 511 | Advanced Agribusiness Management | Analysis of organization behavior, change, and resource requirements within agribusiness systems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 514 | Advanced Agribusiness Analysis | Vertical integration and differentiation in food and agricultural industries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 528 | Advanced Agribusiness Marketing | Theory and analysis of marketing strategy related to food and fiber products. Covers concepts of strategic market planning (e.g., segmenting, targeting and positioning), with application of these concepts at an advanced level. Also examines the broad social, cultural, political and economic issues that impact marketing. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 529 | Advanced Agribusiness Marketing Channels | Analyzes agribusiness market channel systems. Formulation of marketing strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 532 | Advanced Agribusiness Finance | Financial management of agribusiness firms; agribusiness financial analysis, investment analysis, agricultural risk management, and introduction to agricultural financial intermediaries. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 535 | Commodity Analysis | Analysis of commodity markets. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 552 | International Agricultural Policy | Uses international trade theory to analyze the effects of government policies, trade agreements, and exchange rates on agribusiness. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 554 | Advanced International Trade | Advanced international practices in trading of agribusiness, technology, and resource products and services. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 560 | Advanced Agribusiness Management Systems | Development and use of decision support systems for agribusiness management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 561 | Applied Econometrics | Uses model building, hypothesis testing, and empirical analysis in solving agribusiness problems. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AGB | 570 | Managerial Economics for Agribusiness | Concepts in micro- and macroeconomics applied to agribusiness management environments: price formation, market structure, information economics, fiscal and monetary policy. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 589 | Agribusiness Capstone | Strategic management of organizations focusing on developing value-creating strategies in dynamic environments. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 701 | Advanced Agribusiness I | Advanced topics include demand analysis, empirical industrial organization, welfare economics, agricultural policy, international trade, and consumer behavior. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 702 | Advanced Agribusiness II | Topics include macromarketing, marketing research, futures and options markets, derivatives, risk management, financial innovation, and forecasting. | N | LEL | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 703 | Agribusiness Research Methods | Survey course in current research methods in economics, marketing, finance, and management as applied to agribusiness topics. May be repeated for credit. | N | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AGB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 180 | Introduction to American Indian Studies | Introduces the study of American Indian justice issues from an interdisciplinary perspective. Primary topics include sovereignty, law, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| AIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 280 | American Indian Sovereignty and the Courts | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. government. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 285 | Federal Indian Policy | Examines the sovereign status of American Indians and legal relationships between the tribes and the U.S. government. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | H & C | |
| AIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 320 | American Indian Philosophies and World Views | Does it make sense to speak about American Indian intellectuals, thinkers or philosophers? Not only have Indians been thinking and thinking deeply for generations, but they have also produced a body of written works that have formed the foundation of contemporary American Indian studies. Covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | HU & C | Prerequisite(s): junior standing; ENG 102, 105 or 108 with C or better. Credit is allowed for only AIS 320 or 394 (American Indian Philosophical/World Views) |
| AIS | 360 | Issues in Urban Indian Country | In-depth examination of the historical, social, economic, and political implications of indigenous migrations to urban areas. Over 50% of Native people are living in cities. What are they doing? Why are they there? Are they still under the federal trust relationship? Evaluates the social, political, and economic structures built by American Indians living in the urban environment. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 360 or 394 (Issues in Urban Indian Country) |
| AIS | 370 | American Indian Languages and Cultures | Emphasizes understanding of Indian language families and the relationship of oral traditions to culture. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisite: AIS 180 with C or better |
| AIS | 380 | Contemporary Issues of American Indian Nations | Surveys legal, socioeconomic, political, and educational state of contemporary reservation and urban Indians. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | |
| AIS | 381 | American Indian Women | Draws from a diverse range of indigenous critical traditions to examine discourses of gender, identity, and sexuality as sites of cultural revitalization and conflict and theorizes the meaning of each of these categories from diverse Indigenous communities. Considers contemporary and traditional works by Indigenous women with a special emphasis on the historical, socio-cultural, and legal contexts of each work. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | C | Pre-requisites: WST 100, 300, or AIS 180 with C or better OR co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit is allowed for only AIS 381 or WST 382 |
| AIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 420 | American Indian Studies Research Methods | Surveys diverse research methods, including statistical, historical, interpretative, and narrative approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | L | Pre-requisite: AIS 180 with C or better |
| AIS | 430 | Contemporary Indigenous Spirituality | Why do so many indigenous people across North America want to revitalize their traditional ways when there is supposedly so much opportunity awaiting them in all segments of American society? What are the benefits of such an endeavor and what might be the consequences if this objective is not pursued? This course is premised on the hypothesis that indigenous customs and beliefs contain knowledge that is not only vital to the well-being of the communities in which this native wisdom is found, but also to those communities seeking a more sustainable way of living in the land they call home. After delving into a critique of the religious principles that went into the settling of America, complete with notions of manifest destiny, a way is opened for a more native-oriented discourse on community, nature, economy, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 430 or 494 (Ind Spirituality in Postmodern) |
| AIS | 440 | Cultural Professionalism | Emphasizes professional and leadership skills to prepare students for academic and career endeavors after undergraduate degree completion. Explores indigenous perspectives on communication, research, professional and leadership skills. Research focuses on addressing the needs of Arizona Indian Nations and Tribes and culminates in a research paper, in-class presentation and community development poster presentation. Showcases research posters in a research symposium in which guests vote on the most innovative and practical poster proposal. | N | LEC | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only AIS 440 or AIS 494 (Cultural Professionalism) |

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| AIS | 455 | Human Rights and Cultural Resource Laws | Examines how U.S. laws, policies, executive orders, and court decisions have affected Indian nations and peoples in matters of cultural resources and burial rights. Considers the protests, legal battles, and political campaigns Indians have waged to reaffirm their fundamental human rights in the areas of repatriation and sacred sites protection. Examines the ways in which filmmakers and the media present these issues to the public. Assesses the present status of Indian religious rights and cultural resource laws. Sovereignty and its relationship to Indian spirituality is a theme that permeates the course. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum Junior standing; Credit is allowed for only AIS 455 or 494 (American Indian Cultural Resources) |
| AIS | 470 | Tribal Governance | Critical and historical examination of Indigenous governance and leadership. Includes a survey of historical policy developments and political change that laid the foundation for contemporary Indian government and an assessment of the effectiveness of modern tribal administrations and decision-making bodies. Explores the diverse approaches to tribal governance, community-based political strategy and local interpretations and assertions of sovereignty and self-governance. Project work facilitates focused student learning on the challenges and opportunities in government for a specific Indian nation. Case work and consultation with practitioners in Indian government complement textbook reading in law, history and policy. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Pre-requisite: AIS 285; Credit is allowed for only AIS 470 or AIS 494, Tribal Governance |
| AIS | 480 | Actualizing Decolonization | Provides an in-depth investigation of the theory and concepts of colonization, decolonization, and Indigenous peoples in America, with brief comparisons with global Indigenous peoples and experiences. Covers classic scholarly works on colonization and decolonization to understand the frameworks in which colonization and decolonization develops, expands, and impacts Indigenous peoples. Through that theoretical understanding, examines and formulates ways in which decolonization can impact and be integrated into Indigenous lives and communities. Students shift from theory to praxis by writing and presenting on an informal grant proposal for a decolonizing project that can be implemented in an Indigenous or non-Indigenous community. | N | LEC | N | OPT | Liberal Arts and Sciences | American Indian Studies Program | 3 | HU & C & G | Pre-requisites: ENG 101; ENG 102; Junior standing; Credit is allowed for only AIS 480 or 494 (Readings-Decolonization) |
| AIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| AIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | |
| AIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-7 | L | |
| AIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-3 | | |

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| AIS | 501 | American Indian Studies Paradigms | American Indian Studies emerged as an academic discipline in the late 1960s in part because of increasing dissatisfaction among Indians about the works of historians, anthropologists, and other scholars that was very often marred by methodological and conceptual flaws. Course provides an overview of ways of "doing" Indian studies from an American Indian Studies paradigm(s) through a critical examination of some of the most significant works emanating from this growing body of literature. Critiques paradigms that selected scholars have employed in the researching and writing of their topics. Seminar format allows students to take the lead in discussing each week's readings. Covers a range of scholarship dealing with American Indian issues; explores the development of American Indian Studies as an academic discipline; probes paradigms that Indigenous scholars have developed; and considers how those paradigms differ from those used by other disciplines. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 502 | American Indian Studies Research Methods | Prepares students for thesis research, writing, and completion. Surveys graduate research methods in the field of American Indian Studies including historical, interpretative, and narrative approaches. Focuses on methodological issues specific but not limited to American Indian and Indigenous Studies. Focuses on Indian-centered methodological approaches to research that are essential to qualitative writing of the various topics in Indian country and other issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 503 | Contemporary Issues of American Indian Nations | Provides an overview of the current status of American Indian Nations with regard to sovereignty, policy, politics, economy, and society. An exploration of current issues illustrates the unique challenges and innovative solutions put forth by Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 504 | American Indian Film and Activism | Examines the American Indian film and activism with emphases on American Indian production, directing, editing, investigative journalism, documentary film, entertainment, and research. Exposes students to the development of activism in film and how film has been utilized to educate, inspire, and contribute to the challenges in Indian Country. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 505 | Contemporary Visual Arts of American Indians | Focuses on a critical analysis of art, film, and media as they intersect with shaping the image and sustaining the culture of American Indians in North America. Examines the persistent and inappropriate stereotypes of American Indians as portrayed in film and media, including explanations for the persistence of negative stereotypes drawing on various aspects of critical race theory including power, politics, and race. Also introduces the scope and diversity of American Indian art and artists and highlights how native artists portray their views and culture through contemporary image making and representations. Stresses the interplay of art with sovereignty, identity, and politics. Emphasizes the powerful and significant connection between contemporary American Indian art and the persistence of indigenous cultures. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 506 | Indigenous American Literature and the Tribal Community | Teaches Indigenous (Indian, Native American, First Nations) literature's role in Indigenous history, cultural history, philosophy, society, culture, and developing cultural traditions. Students learn how tribal communities articulate themselves intellectually and artistically through literature and its development locally, nationally, and internationally. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 508 | Revitalizing Indigenous Languages | Critically examines Indigenous languages, their decline and revitalization from a language ecology and a self-determination perspective. Includes historical, sociopolitical, educational, linguistic, sociolinguistic, and cultural issues that have had and continue to impact Indigenous peoples and their languages worldwide and their reclamation efforts. Also examines various epistemologies, theories, ideologies, and practices of Indigenous people (including American Indian, Indigenous Alaskan, Hawaiian, Maori, Quechua). Topics include: language policy and planning, language acquisition, child language socialization, identity development, bilingual education, Indigenous language pedagogy, and current models and approaches for Indigenous language maintenance and revitalization (ILMR). | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 509 | American Indian and Indigenous Rights | Examines the rights of American Indian peoples with an emphasis on asserting indigenous rights in national as well as international forums. Challenges students to address issues related, but limited to: treaty rights, land rights, water rights, self-determination, rights to a distinct culture, religion, language, spiritual practices, customs, ceremonies, nationhood, autonomy, to seek redress and justice, rights to education, rights to protect from destruction and violence, rights to economic development, rights to protect lands from military, ecological, cultural, and environmental threats, and other rights that may effect the lives of American Indian people. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 510 | Social Change in American Indian Communities | Committed to the preservation of political autonomy and cultural identity, American Indian communities are increasingly gaining rule over the effects of social change impinged upon them. Recapturing their histories and redefining colonial relationships, they are forging a preferred future grounded in their own traditional institutions of community, religions, and strengthening of self-determination. Provides students with: (1) an understanding of the enduring struggle of American Indian communities to resist the movement of collective assimilation and retain the right of self-determination; (2) an examination over time of social changes in American Indian communities' social structures and their political and social movements towards the establishment of environmental, economic, and social justice; and (3) knowledge of strategies and tactic for achieving social change within American Indian communities that support Indian self-determination and self-governance. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 511 | Genders and Sexualities in American Indian Societies | Grounds students in the theory and concepts of American Indian genders and sexualities. In American Indian societies, there were more than two genders. With colonization through laws, boarding schools, and loss of culture, language, and land, these different genders were attacked and made to disappear. Examine the concepts of gender and sexuality from Native perspectives and theory, and through western imperial views. Also covers the ways in which decolonization plays a role in understanding indigenous genders and sexualities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 512 | Historical Trauma, Healing, and Decolonization | In recent years, scholars have begun to explore the prevalence of historical trauma among American Indian communities. This research argues that the genocide, violence, breakdown of customary cultures through external coercion; and oppression that Indians continue to face at the hands of foreign colonizers has left Indians with harmed with intergenerational self-destructive behavior, domestic violence, suicide, anxiety, depression, low self-esteem, and anger. As a result of this violence and oppression, they have developed models of recovering healthy nations while challenging violations of their human rights in the domestic and international arenas. This history has given rise to a widespread cultural revitalization movement often referred to as decolonization. Scholars from an array of academic disciplines are producing a growing body of literature about decolonization. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 513 | Urban Indian Issues | According to the 2010 Census, 64.1% of the American Indian/Alaskan Native population resides in a place outside of tribal areas. Cities such as Los Angeles, New York, and Phoenix have historically counted more than 25,000 American Indian residents. What draws Indigenous families to urban areas? How does an urban address impact the federal trust relationship with nonreservation Indians? What are the social, political, and economic implications for a family who lives off the reservation and away from tribal homeland? Course explores these issues and dynamics and challenges the student to examine the unique identity and contributions of urban Indians. Students learn the history of Indigenous migrations to the city and assess current needs and concerns through consultation work coordinated with Phoenix area Indian Centers and nonprofit organizations. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 514 | American Indian Intellectuals | Does it make sense to speak about American Indian "intellectuals," "thinkers," or "philosophers"? Not only have Indians been thinking and thinking deeply for generations, but they have produced a body of written works that have formed the foundation of contemporary American Indian studies. Course covers some of the major figures, their works, and the ideas and opinions (many of which were controversial) that shaped their thinking. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 515 | The Work and Legacy of Vine Deloria, Jr | Vine Deloria, Jr, Standing Rock Sioux (1933-2005) has often been referred to as "Uncle Vine" for his role in the intellectual development of innumerable scholars, as well as legal and political figures, all of whom have striven along side Deloria at making the world a better and more just place for indigenous communities. As such, Deloria has also been labeled "the Dean of American Indian Studies" because of his work at shaping the intellectual and political agenda, which began in 1969 with the seminal publication of Custer Died for Your Sins: An Indian Manifesto and continued posthumously with works on the medicine man traditions throughout North America and a reflection on Carl Gustav Jung's analyses of american indian customs and beliefs. this seminar, the first of its kind, takes a comprehensive look at Deloria's philosophical and legalistic legacy by examining his major works and analyzing, in addition to critiquing, the ideas and opinions that shaped his intellectual career. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 516 | Concepts of Power and Indigeneity | Grounds students in the theory and concepts of power and indigeneity with comparisons with global Indigenous peoples and experiences. Through that theoretical understanding, examines and understands ways in which these concepts impact Indigenous communities and formulates ways in which to develop practical ways to address these issues. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 517 | Customary Tribal Law and Governance | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on <u>customary law, justice, and government.</u> | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 518 | Tribal Jurisdiction | Examines traditional governance systems, institutions, and cultures of American Indians, with emphasis on <u>customary law, justice, and government.</u> | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 519 | Burial Rights, Repatriation, and Sacred Places Matters | Probes U.S. laws and policies, court cases, and Indian struggles for dignity, burial rights, repatriation, and religious freedom from the late 1800s to the present. Examines developments in the United Nations and international arena pertaining to Indigenous human rights, religious freedom, repatriation, and sacred places protection. U.S. policies, laws, practices, court decisions, land developers, pot hunters, and archaeologists have restricted the human rights of American Indians in term of burial rights and religious freedom. Congress has enacted cultural resource and environmental protection laws, religious freedom, and reburial laws that aim to regulate the use and abuse of cultural resources and Indian rights. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 521 | American Indian Leadership and Resistance | Examines the modern leadership struggles in American Indian communities with a foundation of traditional concepts of leadership. Topics include leadership qualities and systems pre-contact, federal-tribal relations, state-tribal relations, tribal politics, internal disputes, activism, mobilization, cultural continuity, social change, community leadership, political/elected leadership, diplomacy, political agendas, and other topics related to <u>American Indian leadership and resistance.</u> | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 522 | Tribal Governance | Explores American Indian leadership, political ideology, and the history and current state of tribal government. What makes tribal governments tick? Examines past and present challenges faced by leaders and members of indigenous communities. Brainstorms potential strategies for the further enhancement, protection, and assertion of this indigenous "brand" of governance. How do politics, policy development and the ever-changing face of indigenous sovereignty impact the way we think about governance? How can we educate and inspire tribal communities to have greater ownership and interest in government? Students engage with the current research, debate the issues, and learn from people who provide governance to indigenous communities. Case studies focus on specific issues in local communities. Individual portfolio project work facilitates learning and the articulation of leadership and governance as practiced by <u>one particular tribe of your choice.</u> | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AIS | 523 | Community Development with American Indian Communities | Tribal community development is more complicated than large urban population centers or even rural communities because tribal communities continue to struggle with years of colonial, paternalistic, and assimilationist federal policies that have impeded their efforts to become self-determined and self-governing nations. Provides students with the knowledge and skills they need to support community development in American Indian communities within a self-determined and self-governing context. Content includes: (1) a framework for review of current economic, political, social, and cultural issues facing American Indian communities; (2) an overview of community development theories, of the underlying values behind those ideas, and of the linkages between theory and practice in American Indian and other Indigenous communities; and (3) a sampling of intervention strategies and tactics for effective community development in American Indian communities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 524 | Indian Control of Indian Education: Tribal Colleges and Universities | Examines American Indian control of education from a tribal college and university perspective. Focuses on the tribal college movement, including the historical and contemporary political, policy, research, and best practices that have influenced and sustained tribal colleges and universities. | N | SEM | N | GNA | Liberal Arts and Sciences | American Indian Studies Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| AIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | American Indian Studies Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | American Indian Studies Program | 1-12 | | |
| ALA | 100 | Introduction to Environmental Design | Surveys environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Credit is allowed for only ALA or PUP 100 |
| ALA | 102 | Landscapes and Sustainability | Surveys ideas relating to landscapes and sustainability and the role of landscape architecture in the creation of humanized environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| ALA | 121 | Design Fundamentals I | Development of visual literacy. Introduces drawing and graphic representation as methods of seeing and problem solving. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major |
| ALA | 122 | Design Fundamentals II | Exercises in basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): ALA 121 with C or better; Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 124 |
| ALA | 124 | Design Fundamentals II Lecture | Theory and applications of basic design principles. history and theory of how architecture and landscape architecture design is impacted by basic design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Architecture, Environmental Design or Landscape Architecture major. Corequisite(s): ALA 122 |
| ALA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALA | 225 | Design Fundamentals III | Applies history and theory of design fundamentals with an emphasis on architectural and landscape architectural design issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: Architecture or Landscape Architecture student; ALA 122 with C or better; Passed milestone; Co-requisite: ALA 235 |
| ALA | 226 | Design Fundamentals IV | Basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 4 | | Pre-requisites: ALA 225 with C or better |
| ALA | 235 | Introduction to Computer Modeling | Fundamentals of computer operation, geographic information systems, geometric modeling of 3-D forms and rendering of light, mathematical modeling of processes using spreadsheets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Prerequisite(s): Architecture or Environmental Design or Landscape Architecture major. Corequisite(s): ALA 225 (or EDS 200) |
| ALA | 240 | Sustainable Design in Built Environment | Reviews the physical principles used in the design of sustainable buildings, landscapes, and urban environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| ALA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ALD | 101 | Introduction to Aging Issues | Introduces students to general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in midlife and beyond, living options, caregiving, and retirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ALD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 202 | Field Placement I | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |
| ALD | 203 | Field Placement II | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202 |
| ALD | 204 | Field Placement III | Provides students an opportunity to work directly with older adults in a variety of settings. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better; ALD 202; ALD 203 |
| ALD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 301 | Research Methods in Aging | Examines social science approaches to the study of aging. Includes particular methodological issues that must be considered when studying older adults. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1 | | Pre-requisites: ALD 101 with C or better or currently enrolled |
| ALD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 404 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 420 | Health Issues and Older Adults | Analyzes and synthesizes the biological, social, and behavioral aspects of health and healthcare delivery in the later adult years. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | SB | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 420, 520 or FAS 421 |
| ALD | 431 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC); Credit is allowed for only ALD 431, 531 or FAS 421 |
| ALD | 440 | Social Policy and Aging | Critical analysis and evaluation of the historical, socio-political, and economic issues that are specific to older Americans. Includes federal, state, and local policy | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 460 | Alzheimer's and Related Dementias | In-depth analysis of Alzheimer's disease and related dementias from a caregiver's perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| ALD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | |
| ALD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ALD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | |
| ALD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-7 | L | |
| ALD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-3 | | |
| ALD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 505 | Perspectives on Aging and the Life Course | Overview of general issues of aging, including theoretical background, influences of earlier-life experiences, physical changes, social policies, relationships in mid-life and beyond, living options, caregiving, and retirement. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 520 | Health Aspects of Aging Adults | Examines biological, social, and behavioral aspects of health in the later years, and the organization and delivery of care. Includes an emphasis on wellness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); ALD 505 with a grade of C or better, or co-enrolled. Credit is allowed for only ALD 420 or 520 |
| ALD | 525 | Mental Health in Midlife and Beyond | Focuses on the psychological, emotional, and cognitive changes as individuals age. Includes assessment and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 531 | Caregiving Issues for Families and Professionals | Examines the issues of caregiving by family members, in-home aids, and professionals in care facilities. Focuses on issues related to providing care to older adults in a variety of settings. Includes social policy toward caregiving, caregiver stress and reward, the role of social workers, and cultural concerns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre/Co-requisites: ALD 505 with C or better if completed; Credit is allowed for only ALD 431, 531 or FAS 421 |

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| ALD | 535 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | REC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 540 | Public Policy Issues and Aging | Examines in detail the historical, socio-political, and economic issues that are specific to older Americans at the federal, state, and local levels. Requires applied project. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 545 | Elder Abuse and Neglect | Provides a comprehensive review of crimes against older adults. Includes all types of abuse and neglect, as well as prevention, intervention, and public policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 560 | Dementia | Thorough examination of dementia and dementia syndromes, including Alzheimer's disease. Includes the complexity and diversity of behaviors that define dementia, and implications for planning interventions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ALD 460 or 560 |
| ALD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | LEC | Y | Z2 | Liberal Arts and Sciences | School of Aging and Lifespan Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 360 | Renewable Energy Technologies: Fundamentals and Integration | Technical fundamentals, economic, and social aspects of renewable energy technologies with emphasis on solar cells, hydrogen economy, and fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MAT 266; PHY 112; CHM 113 |
| ALT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 401 | Hydrogen Generation, Storage, and Distribution | Overview of primary technologies, economic aspects, and social policy issues related to development of hydrogen systems and hydrogen economy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): ALT 360. Credit is allowed for only ALT 401 or ALT 501 |
| ALT | 405 | Power Conditioning | Fundamentals of power electronics; DC-DC converters and DC-AC inverters; battery charge controllers. Lab experience. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only ALT 405 or 505 |
| ALT | 410 | Solar Cells and Module | Basic device physics and engineering of solar cells. Lab experience on fabrication, characterization, and testing of solar cells and module. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331 |
| ALT | 412 | Village Energy Systems | The role of energy resources in economic development. The need for and use of energy at the Base of the Economic Pyramid (BoP). Individual Problem Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Senior Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum. Credit is allowed for only ALT 412 or ALT 494 (Village Energy Systems) |
| ALT | 420 | Electrochemical Energy Technologies | Thermodynamic and electrochemical principles of fuel cells. Hands-on experience on fabrication and testing of fuel cells; problem solving skills. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: CHM 113; ALT 360 |
| ALT | 435 | Applied Photovoltaics | Overview of solar radiation, operating principles of photovoltaics, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; ALT 410 (not required for BAS students); Credit is allowed for only ALT 435 or 535 |

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| ALT | 445 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: ALT 360; CHM 113; Credit is allowed for only ALT 445 or 545 |
| ALT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| ALT | 502 | Batteries for Portable Electronics | Theoretical and practical overview of primary, secondary, and lithium batteries. Key performance characteristics, construction materials, typical applications, recycling, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 503 | Fuel Cells for Portable Electronics | Overview of electrochemistry, portable electronics industry, principles of fuel cells, and prospects for micro fuel cells. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 505 | Power Conditioning | Fundamentals of power electronics, DC-DC converters and DC-AC inverters, battery charge controllers. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only ALT 405 or 505 |
| ALT | 507 | Evaluations of Photovoltaic and Fuel Cell Systems | Field testing, data collection, and evaluation of real-world photovoltaic and fuel cell systems available on campus and data analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 512 | Village Energy Systems | Establishes leadership in the development of energy resources at the Base of the Economic Pyramid (BoP). Individual Problem-Based Learning (PBL) investigations of potential solutions to energy-poverty at the BoP. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate Standing in Engineering, Engineering Technology, Mathematics or another Science-based curriculum; Credit allowed for only ALT 512 or ALT 598 (Village Energy Systems) |
| ALT | 515 | Alternative Energy Reliability and Standards | Alternative energy systems and their reliability issues, accelerated life and safety testing, standards and codes, regulatory requirements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ALT | 535 | Applied Photovoltaics | Term projects, overview of solar radiation, operating principles, qualitative analysis on influencing parameters, market trends, basics of PV systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only ALT 435 or 535 |
| ALT | 545 | Automotive and Stationary Fuel Cell Systems | Practical overview of fuel cell systems for stationary, residential, and transportation applications based on load and duty cycle requirement of specific applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status. Credit is allowed for only ALT 445 or 545 |
| ALT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 101 | ASU Digital Culture Experience | Orientation to the Digital Culture program with emphasis on resources for academic success. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): Herberger Institute for Design and the Arts Digital Culture BA major; Credit is allowed for only AME 101 or AME 194 (ASU Digital Culture Experience) |
| AME | 111 | Introduction to Digital Culture | Examines the effects of digital technology on the way we live, communicate, learn, and create. Proposes that we are moving towards a hybrid (physical-digital) existence and culture. Traces that evolution, looks at current examples of hybrid cultural processes and outcomes, and discusses possible future trends. Discusses how these changes are influencing the work and career possibilities of people involved in all aspects of human culture. Comprises diverse readings, media products, class interaction, group discussion and hands-on collaborative projects exploring concepts covered in class. Also includes a number of guest lectures from ASU faculty. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | CS | Credit is allowed for only AME 111 or 194 (Introduction to Digital Culture) |
| AME | 112 | Computational Thinking for Digital Culture | Introduces fundamental concepts relevant for understanding computation. What are algorithms and how can computer code express them? Basics of how real-world signals are captured, encoded, recorded, retrieved and decoded. Designed for students with little or no background in programming. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 112 or 194 (Computational Thinking for Digital Culture) |
| AME | 120 | Digital Culture Studio | Provides advice on career preparation and industry skills through a series of guest lectures. Sample topics include resumes, personal Websites and portfolios, how to pitch a project idea, and topics chosen by guest industry presenters. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Credit is allowed for only AME 120 or AME 194 (Digital Culture Studio) |
| AME | 130 | Prototyping Dreams | How do you build your dreams? Explores the idea of inspirational prototyping across multiple media, including physical fabrication, science fiction, virtual worlds and film. Students create and iterate their own prototypes for visions of the future: new technologies, solutions to challenges, and tools or systems that expand the horizon of human potential. These prototypes do not have to be functional tools, but they must be functional stories, effectively sharing the creator's vision with others. Just as the Star Trek communicator inspired early cellphones, these prototypes will help shape new conversations about the future we want to build. Surveys a series of creative paradigms for inspirational prototyping, including design fiction, rapid fabrication and 3D printing, science fiction prototyping, gaming and virtual world-building. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 130 or AME 194 (Prototyping Dreams) |
| AME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |

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| AME | 220 | Programming for the Web | Introduces a range of technologies used for Web development: marking up content with HTML, styling with CSS and interaction using Javascript. Explores the latest foundational Web standards such as HTML5 and CSS3 to learn how to create compelling content for the World Wide Web. Goes beyond simply coding a Web page to understanding how the Web works. The World Wide Web is used in an incredible variety of applications that we now find integral to our lives, from talking to our friends on Facebook to discovering music on the iTunes Music Store, paying bills from our bank's Web site to finding the route to our vacation destination on Google maps. Investigates how Web standards have enabled the creation of dynamic applications delivered over the Internet. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 220 or AME 294 (Programming for the Web) |
| AME | 230 | Programming for the Media Arts | Introductory-level course in practical aspects of programming systems for media arts. Explores techniques in programming in the context of images, sounds, interaction, networking and data visualization. Uses the processing programming language, an accessible yet powerful environment for learning how to program. Students create images, animations and interactive programs, and learn how to use images, movies, sound files, microphones and cameras in their programs. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Credit is allowed for only AME 230 or AME 294 (Programming for Media Arts) |
| AME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 310 | Media Literacies and Composition | When we integrate computational systems into the core of our cultural and social practices, we reinvent how we tell stories. The roles of creators, critics and audiences are blurring at the same time that digital tools allow us to infinitely reproduce and remix narratives, radically changing what we mean by the "work" or "text." These new media platforms empower us to create, share and respond to cultural narratives that defy traditional notions of how stories operate, demanding new literacies. Explores our powers and responsibilities as readers, writers and creators of new cultural languages, including new forms such as games, digital video, electronic literature and social media. Students study relevant media narratives and cultural ecosystems from the 20th and 21st centuries, acquiring a set of literacies that they hone through practices of authorship, critique and collaboration, culminating in the presentation of their own digital media narratives. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 310 or AME 394 (Media Literacies & Composition) |
| AME | 320 | Motion Capture for Integrative Systems | Presents the broad principles and techniques for movement study in oneself and others that includes applied, dynamic anatomy. Also presents the functional techniques for motion capture with a special emphasis on the capture of human movement from visual sensors. Students understand the technology behind motion capture; a high-level understanding of movement and anatomical systems; the ability to perform motion capture and customize it to suit the requirements of specific creative applications in animation, sound and live performance as well as applications in movement rehabilitation and education. Looks at the technology behind various modern motion capture systems based on markers, inertial sensors, accelerometers, and depth sensors, so the student appreciates the technical capabilities and limitations of each technique. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 320 or AME 394 (Motion Capture for Integrative Systems) |
| AME | 340 | Compositional and Computational Principles for Media Arts | In much of today's contemporary art practice there is a tight coupling of compositional form, content and underlying computational mechanisms. This integration holds the potential to yield new modes of expression and wholly new art experiences as is evident in emerging forms of real-time generative art, network-based art, game-based art, and interactive performance. As both practitioners and participants, we must develop a critical understanding of the relevant compositional and computational principles that frame this work. Students study relevant media art works from the 20th and 21st century, develop a working understanding of fundamental compositional and computational principles, and apply their understanding through the realization of exploratory media artworks that are presented at the end of the semester. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours. Credit is allowed for only AME 340 or AME 394 (Compositional & Computational Principles for Media) |

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| AME | 385 | Collaborative Projects and Research I | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major; Minimum 45 earned hours; Credit is allowed for only AME 385 or 394 (Collaborative Projects & Research I) |
| AME | 386 | Collaborative Projects and Research II | Project-based class for experience in collaborative design principles, project pitching and research. Includes readings and small projects with teams formed at the outset of the class. Over the course, teams develop their own project along with a schedule for realization. Project themes vary, yet all projects must explore relationships of digital technologies and cultural products or processes. Includes presentations, discussion and analysis of team projects. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 385; Credit is allowed for only AME 386 or 394 (Collaborative Projects & Research II) |
| AME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 470 | Programming for Social and Interactive Media | Web sites, desktop applications connected to the "cloud" and mobile applications depend on services supplied by server-based software that is the invisible center of users' networked experiences. Applications and data served over the Web are at the core of popular software from social applications such as Facebook, Twitter or Instagram to networked media like iTunes, Netflix or Hulu. Investigates the development of Web applications and services. Creates modern dynamic Web applications using open source technologies. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): Digital Culture major; minimum 45 hours; Credit is allowed for only AME 470 or AME 570 or AME 494 (Programming for Social and Interactive Media) or AME 598 (Programming for Social and Interactive Media) |
| AME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | |
| AME | 485 | Digital Culture Capstone I | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): BA in the Arts (Digital Culture) or BA Design Studies (Digital Culture) or Digital Culture major or minor or certificate; minimum 45 hours. Credit is allowed for only AME 485 or AME 494 (Digital Culture Capstone I) |
| AME | 486 | Digital Culture Capstone II | Senior capstone projects in digital culture are interdisciplinary team projects that offer experience in diverse collaborations for solving complex problems, a proficiency widely demanded by employers. Students integrate, extend and apply information, principles, theories and/or methods learned in previous courses while supervised by the instructor. | N | STO | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Pre-requisites: AME 485; Credit is allowed for only AME 486 or 494 (Digital Culture Capstone II) |
| AME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | | Prerequisite(s): Barrett Honors student |
| AME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | |
| AME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-7 | L | |
| AME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-3 | | |
| AME | 530 | Experiential Media Methodology and Theory I | Engages students in the theory and practice of designing and evaluating experiential media systems. Building on ideas and concepts explored in the companion introductory course, students create and critique a variety of integrated media systems demonstrating technical competence, aesthetic knowledge, analytic rigor and theoretical relevance. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only AME 530 or 598 (Experiential Media Methodology and Theory I) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AME | 531 | Experiential Media Methodology and Theory II | Focuses on media arts and sciences in the 20th and 21st century, discussing issues surrounding the definition of the field, media art creation practices, methods of criticism and analysis, interdisciplinary/transdisciplinary work and research, collaboration and current trends. Also focuses on the methodology, theory and history behind the design and development of experiential media systems. Directed toward those interested in researching, designing, building or critiquing experiential media systems that are culturally provocative, socially meaningful and deeply essential. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): AME 530; credit is allowed for only AME 531 or 598 (Experiential Media Methodology and Theory II) |
| AME | 532 | Creating by Algorithm | Focuses on creation of media of all kinds using computation. Using algorithms it is possible to create complex media that is difficult or impossible by traditional methods. Some techniques can capture the unpredictable evolutionary and emergent behavior found in nature. Investigates influential algorithmic methods including stochastic processes and Markov chains, Perlin noise, cellular automata, fractals, L-systems and genetic algorithms. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 533 | Realtime Data Analysis and Pattern Recognition for Interaction | Real-time computing is increasingly used in a variety of settings and scenarios--no more so than in mobile computing. Embedded within our mobile devices are a multitude of onboard sensors, including a three-axis accelerometer, magnetometers, microphones, cameras and GPS. Explores, through the frame of mobile computing, the foundations of employing real-time sensor, visual or audio signals to deliver novel media applications. Introduces computational techniques for classification, detection and recognition of these diverse signal sources through practical example and relevant literature, including signal smoothing, feature extraction, clustering, pattern recognition, neural networks and content classification. Introduces the technical possibilities for such systems as well as the considerations involved in designing and developing real-time solutions. | N | LEC | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 541 | Interactive Forms | This course explores how computational models can enhance the form, meaning, and engagement of interactive mediated experiences. Special emphasis is given on how new computational models (stochastic procedures, non-linear dynamics) can be used to mediate the complexity of our current experiences. | N | LEC | N | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 570 | Programming for Social and Interactive Media | Web sites, desktop applications connected to the "cloud" and mobile applications depend on services supplied by server-based software that is the invisible center of users' networked experiences. Applications and data servered over the Web are at the core of popular software from social applications such as Facebook, Twitter or Instagram to networked media like iTunes, Netflix or Hulu. Investigates the development of Web applications and services. Creates modern dynamic Web applications using open source technologies. | N | LEL | N | GNA | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only AME 470 or AME 570 or AME 494 (Programming for Social and Interactive Media) or AME 598 (Programming for Social and Interactive Media) |
| AME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 590 | Reading And Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AME | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | Arts, Media and Engineering Sch T | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 100 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | MA | Prerequisite(s): MAT 117 with C or better (or MAT 194: EFM with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| AML | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 253 | Introduction to Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| AML | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 330 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisite(s): AML 100 or MAT 142, 170, 210, 265, or 270 with C or better OR Mathematics Placement Test score of 50% or higher; minimum 56 hours; Credit is allowed for only ASB 430 or CPI 430 or AML 330 |
| AML | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 406 | Directed Reading and Research in Applied Mathematics for the Life and Social Sciences | Collaborative, practice-oriented course where students produce individual or team-initiated research project reports on pertinent topics in the life and social sciences. Students select topics, design, identify and formulate effective research ideas, and then translate them into clear and effective research plans. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: AML 100 and MAT 342 (or MAT 343); 86 minimum hours |

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| AML | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210(or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| AML | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| AML | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AML | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| AML | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| AML | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | L | |
| AML | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| AML | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only AML, ESS or SOS 540 |
| AML | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| AML | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AML | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 610 | Topics in Applied Mathematics for the Life and Social Sciences | Introductory course in applied mathematics for the life and social sciences, combined with the first semester of a two-semester course in mathematical biology. Provides a solid introduction to the modeling of biological and social processes as well as to some of the mathematical approaches involved in their analysis and simulation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 612 | Applied Mathematics for the Life and Social Sciences Modeling Seminar | Presents and applies mathematical modeling principles and techniques for representing the structure and operation of complex life and social systems and processes. Helps students identify potential problems in the life and social sciences and the corresponding mathematical and statistical methods that can be used for their study. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AML | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AML | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 201 | American Style | Provides an intellectual foundation for the interdisciplinary study of American culture, history, and society. Introduces students to ideas, methods, tools, and theories in the vibrant field of American studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| AMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 310 | History of American Systems to 1865 | First of a two-part survey of political, legal, and economic institutions, placed in the context of the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| AMS | 311 | History of American Systems Since 1865 | Second in a two-part survey of political, legal, and economic institutions, placed in the context of a dynamic industrialist capitalist society, from the age of industrialism and modern America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| AMS | 320 | American Cultural History I | First of a two-part survey of American culture, broadly defined as historically transmitted patterns of meaning expressed in symbolic forms, including ideas, ideals, the arts, and social and economic standards from the nation's colonial background and early national period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| AMS | 326 | Popular Culture | Topics in American popular culture, including theories of popular culture; the history and analysis of mass media, including television, film, and the music industry; and vernacular art and the folk tradition. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 327 | Regional Cultures | Examines the concept of regionalism and regional cultures in America with a special emphasis on the Southwest/Borderlands. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 330 | American Lives | Examines American society through the study of autobiography and ethnography. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Prerequisite(s): minimum 30 hours |
| AMS | 332 | Studies in Race and Ethnicity | Topics relating to issues of race and ethnicity in American life. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 334 | American Class | Explores social class and inequality in the U.S. including history, culture, work, politics, globalization, and intersections of gender, race, ethnicity, and place. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): minimum sophomore standing |
| AMS | 335 | American Biography | Topics in biographies of individuals, comparative biographies, the art of biography, and the function of autobiography. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |

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| AMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 412 | Studies in American Politics & Law | Topics in American political and legal systems, including social movements in the United States and women and the law. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 417 | Religious Traditions of the American Southwest | Examines the sacred traditions that have evolved within the North American Southwest context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| AMS | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| AMS | 422 | Studies in American Literature | Topics in American literature, including contemporary American comic fiction, literature of the American South, literature of American wars, Hispanic chronicles of the Southwest, literature of la Chicana, and American rhetoric. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 428 | Chicano Cultures in the Southwest | Examines and explores Chicana and Chicano culture as place and sentiment. The physical place and space and the sentiment related to Chicanas and Chicanos. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Credit is allowed for only MAS 598 (Chicano Cultures) or AMS 428 |
| AMS | 429 | Interdisciplinary Topics | Senior-level seminar that examines issues relevant to two or more American cultures' fields. Topics may include Southwest/border Hispanic folklore, Southwestern corridors, American art and the city, and the West of the imagination. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 431 | Gender Studies | Topics relating to issues of gender in American life. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| AMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 490 | Writing Certificate Portfolio | Preparing a portfolio demonstrating advanced writing skills. Limited to and required of students in the Writing Certificate Program. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | |
| AMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| AMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 101 or 105 with C or better; AMS 301 with C or better |
| AMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| AMS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 502 | American Studies: Theory and Method | Explores some of the major themes in American studies scholarship by considering American cultural formation and change over the last two centuries. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): MA American Studies major |
| AMS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| AMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| AMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| AMT | 101 | Introduction to Aeronautical Management Technology | Facilitates entry into aeronautical management technology programs. Emphasizes General Catalog; major and concentration requirements, registration, careers, and Polytechnic campus resources. Introduces various learning styles and strategies that assist students in becoming successful learners. Emphasizes time management techniques and academic integrity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | |
| AMT | 105 | Flight Operations and Safety I | Supervised private pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for private pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and FAA Practical Exam(s) within the appropriate flight training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students following the single engine flight training track earn their Single Engine Private Pilot certificate. Students following the multiengine flight training track earn their Single Engine Private Pilot Certificate and their Multiengine Private Pilot certificate. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Professional flight program secondary application; Pre- or corequisite(s): AMT 182 and AMT 220 with C or better if completed |
| AMT | 110 | Flight Operations & Safety II | Concludes supervised private pilot operations and flight training and introduces students to supervised commercial pilot operations, flight training, flight safety briefings, and recurrent aviation subjects appropriate for private and commercial pilots. Flight instruction costs are not included in university tuition and fees. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 105 with C or better; Pre- or corequisite(s): AMT 222 with C or better if completed |
| AMT | 150 | Flight Operations & Safety III | Continuation of supervised instrument pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for instrument pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons and the FAA practical exam within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Instrument Rating. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 110 with C or better |
| AMT | 170 | Introduction to Unmanned Aircraft Systems | Introduces the history of unmanned aircraft systems and current and future developments in civil and military operations. Specific blocks deal with elements that form an unmanned aircraft system: unmanned vehicles, communication, navigation, launch and recovery, control stations, payloads, and support equipment. Explores other current issues in unmanned aircraft operations: aviation regulatory system and integration, safety and human factors, ethical and legal issues, and the future unmanned aircraft systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 182 | Private Pilot Ground School | Ground school preparation for Private Pilot Certificate. Aerodynamics, navigation, performance, and regulations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 201 | Air Traffic Control | Ground and air operations; weather services communications and routing; flight plans, IFR operations, departures and arrivals; and airport conditions and emergencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: BAS Applied Science (Aviation Management Technology) OR BS Aeronautical Management Technology OR BS Air Traffic Management major |
| AMT | 205 | Flight Operations and Safety IV | Continuing introduction to commercial pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight syllabus topics, student handbook/general operations manual, monthly safety and informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 150 with C or better |

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| AMT | 210 | Flight Operations and Safety V | Covers instrument pilot flight operations. Flight instruction, lecture, quizzes and discussion of the current flight topics, student handbooks, operations manual, monthly safety meetings, informational briefings. Students must maintain enrollment in the appropriate flight operations and safety course while engaging in flight training activities. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate training syllabus, and satisfactorily completing all academic requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) student; AMT 205 with C or better |
| AMT | 214 | Commercial Pilot Ground School | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 1 of 2). 10 hours ground trainer included. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Aeronautical Management Technology major; AMT 182 and 220 with C or better |
| AMT | 220 | Aviation Meteorology | Evaluation, analysis, and interpretation of atmospheric phenomena. Low- and high-altitude weather from the pilot's viewpoint. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | |
| AMT | 222 | Instrument Pilot Ground School | Ground school leading to FAA Instrument Pilot Rating/Commercial Pilot Certificate (part 2 of 2). 10 hours ground trainer included. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 105 and AMT 182 with C or better, OR nonmajor: AMT 182 with C or better |
| AMT | 250 | Flight Operations and Safety VI | Continuing introduction to commercial pilot flight operations and begins to introduce the student to certified flight instructor flight operations. Primary activities include flight instruction, lecture and discussion of the current flight syllabus topics, handbooks and general operations manual as well as monthly safety and other informational briefings. The flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 210 with C or better |
| AMT | 270 | Unmanned Aircraft | Introduces elements comprising the unmanned aircraft system (UAS). Includes review of UAS, Unmanned Aerial Vehicle (UAV); system development and certification, selection and design, aerodynamics and airframe configurations, characteristics of vehicle types, design standards and regulatory aspects, airframe design, payload types, and control and stability. Students apply concepts acquired in classroom sessions and construct various unmanned aircraft, train to operate using existing simulators, and conduct flight-testing. The final course project is the design, development and construction of a group 1 unmanned aircraft, serving as the core unmanned vehicle used in subsequent UAS courses. Incorporates UAS data collection and analysis throughout the course. Course concepts enable UAS student pilots to become knowledgeable of aerodynamic aspects of UAV to ensure safety of flight and improved maneuverability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 170 with C or better |
| AMT | 280 | Aerospace Structures, Materials and Systems | Basic aerodynamics, incompressible/compressible airflow, wind tunnel testing, wing theory; analysis of aircraft structures; properties and applications of materials, and aircraft systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre- or corequisite(s): PHY 111, 113 |
| AMT | 285 | Flight Instructor Ground School | Ground school in preparation for the FAA Flight Instructor Certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s) with C or better: AMT 150, 214 |
| AMT | 286 | Multiengine Pilot Ground School | Ground school preparation for the FAA Multiengine Rating. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre- or corequisite(s): AMT 150 with C or better if completed; Aeronautical Management Technology (Professional Flight) major |
| AMT | 287 | Aircraft Powerplants | Theory and performance analysis of gas turbine and reciprocating aircraft engines. Engine accessories, systems, and environmental control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 4 | | Pre/Co-requisite: PHY 111 or PHY 121 |
| AMT | 292 | Flight Instructor Instrument Ground School | Ground school preparation for the FAA Instrument Flight Instructor Rating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 205 and 222 with C or better; AMT 285 or 385 with C or better |
| AMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 305 | Flight Operations & Safety VII | Continuation of supervised multiengine commercial pilot operations, introduction of single engine commercial pilot operations, flight instruction, flight safety briefings and recurrent aviation subjects appropriate for commercial pilots. Flight instruction is considered to be the laboratory for this academic class. Course completion requirements are based on completion of lessons within the appropriate FAA-approved Part 141 training syllabus and satisfactorily completing all academic requirements. Flight instruction costs are not included in university tuition and fees. Students earn their Commercial Multiengine and Commercial Single Engine certificates. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Pre-requisites: Aeronautical Management Technology Professional Flight major; AMT 250 with C or better |
| AMT | 308 | Air Transportation | Studies the historical and international development of air transportation and its social, political, and economic impact upon global interrelationships. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | G | Pre-requisite: Minimum 50 hours |

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| AMT | 310 | Flight Operations and Safety VIII | Covers certified flight instructor instrument (CFII) and multiengine flight operations. Flight instruction, lecture and discussion of the current flight topics, student information handbooks, general operations manual (GOM), monthly safety, informational briefings. Requires enrollment in appropriate flight operations and safety course while engaging in flight training activities. Flight training is considered to be the laboratory for this academic class. Course completion requirements are based upon completion of lessons within the appropriate flight training syllabus. | N | LEL | Y | GNA | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 286 and 305 with C or better. Pre- or corequisite(s): AMT 292 (or AMT 392) with C or better if completed |
| AMT | 350 | Aircraft Design and Logistics Management | Fundamental aircraft design principles, including performance factors associated with mission profiles and the identification of basic logistical support requirements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 280 with C or better; Pre/Co-requisite: AMT 287 with C or better if completed |
| AMT | 360 | Aircraft Dispatch Ground School | Aeronautical knowledge areas required for Aircraft Dispatch certification, as well as preparation for the Aircraft Dispatch knowledge examination. Regulations, aerodynamics, emergencies, flight physiology, weight and balance, navigation, aircraft performance, meteorology, and flight operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 214; AMT 220; AMT 222; Credit is allowed for only AMT 360 or AMT 394 (Airline Dispatcher Ground School) |
| AMT | 370 | Unmanned Aircraft Systems | Students build upon gained knowledge, skills and experience by exploring unmanned aircraft avionics, autopilot systems, first person video (FPV), on-screen displays (OSD), communication systems, command and control (C2), ground control stations (GCS), flight software, and UAV launch and recovery systems. Students continue flight training and gain proficiency in unmanned aircraft operation using simulators and hands-on flight-testing. Students demonstrate their abilities to upgrade and modify their previously constructed unmanned aircraft in order to operate and conduct actual flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 270 with C or better |
| AMT | 382 | Air Navigation | Theory and application of modern advanced navigation and flight instrument systems. Introduces crew resource management in multiple cockpits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 250 with C or better; Minimum 64 hours |
| AMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | |
| AMT | 396 | Aviation Professional | Career focus for management and flight students, including internships, writing, interviews, and employment search in aviation industry. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): BAS or BS aviation program major; junior standing |
| AMT | 408 | National Aviation Policy | Examines aviation and airspace policies and policy process, including agencies involved in formulation, implementation, and evaluation of aviation policy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 410 | Aviation Safety and Human Factors | Aviation accident prevention, human factors, life support, fire prevention, accident investigation, and crash survivability. Development and analysis of aviation safety programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 182 with C or better; AMT 308 with C or better |
| AMT | 442 | Aviation Law and Regulations | Aviation within context of U.S. Common Law system. Public law, administrative rule making, sovereignty, enforcement, and case law analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 308 with C or better |
| AMT | 444 | Airport Management and Planning | Orientation to administration and management of modern public airports, including overview of planning, funding, and development of airport facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: AMT 308 with C or better |
| AMT | 456 | Introduction to Organized Labor | Introduces labor relations, unions, federations, collective bargaining, grievances, and labor legislation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| AMT | 460 | Aircraft Dispatch Capstone | Capstone for aircraft dispatch whereby students are engaged in practical applications of regulations, aerodynamics, emergencies, flight physiology, weight and balance, navigation, aircraft performance, meteorology and flight operations. Uses various scenarios in which students can employ the strategies and procedures necessary for safe flight. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 360 |
| AMT | 470 | Unmanned Aircraft Payloads, Sensors, and Control Stations | Builds on previously gained knowledge and experience. Student pilots utilize long-range communication and data links, UAS sensors, geospatial data collection, and still-imaging mosaicking. Students continue flight training using existing simulators and flight-tests during the course. Students apply concepts acquired during classroom sessions and construct a ground control station, modify and upgrade existing unmanned aircraft with payloads/sensors, train to operate sensors using existing simulators, and conduct flight-testing. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 370 with C or better |
| AMT | 482 | Airline Instrument Procedures | Advanced instrument flight using airline instrument procedures and airline crew and cockpit resource management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Aeronautical Management Technology (Professional Flight) major; AMT 382 with C or better |
| AMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): AMT 308 with C or better; junior standing |

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| AMT | 486 | Regional Jet Aircraft Systems | Regional jet airline aircraft systems and flight procedures. Includes theoretical education for regional jet commercial passenger aircraft. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 382 with C or better; Aeronautical Management Technology (Professional Flight) student |
| AMT | 488 | Regional Jet Aircraft Systems II | Regional jet systems, with emphasis on air navigation systems, including Flight Management System (FMS), Selective Calling (SELCAL), and flight profiles. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: Aeronautical Management Technology (Professional Flight) student; AMT 382 with C or better |
| AMT | 489 | Airline Administration | Administrative organizations, economics of airline administration, operational structure, and relationship with federal government agencies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: Minimum Junior status; AMT 308 with C or better |
| AMT | 490 | Regional Jet Operations Capstone | Regional jet aircraft operations and flight procedures. Includes theoretical education for RJ aircraft, FTD and full-motion simulator time. | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Aeronautical Management Technology (Professional Flight) major; AMT 205 and 482 and 486 with C or better |
| AMT | 491 | Aviation Management Capstone | Integrated group project with industry partner to address current problems in either air carrier or airport management focus area. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): junior standing. Pre- or corequisite(s): AMT 489 with C or better if completed |
| AMT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| AMT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Pre-requisite: Minimum 2.25 GPA |
| AMT | 495 | Unmanned Aircraft Systems Operations | Capstone course applies student pilots' knowledge and skills gained in previous UAS courses to safely deploy a UAS in response to real-world situation or research. Students collaborate with other university departments, state or federal agencies, and other organizations and conduct actual or simulated missions in geospatial data collection, search and rescue, and near-space operations. Course blocks include flight planning and preparation, aircraft preflight and maintenance, launch and recovery operations, payload operations, normal and emergency procedures, and mission planning and execution. Students continue flight training using existing simulators and flight-tests. Students use real-world situations which require deployment of equipment and systems developed during previous course. Places specific emphasis on aircraft and payload selection based upon proposed mission analysis. Incorporates UAS data collection and analysis throughout the course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 470 |
| AMT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-7 | L | |
| AMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-3 | | |
| AMT | 522 | Aviation Law | Examines the U.S. legal system with a focus on the aviation perspective, administrative agencies, FAA enforcement, and case law. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 523 | Intermodal Transportation Management | Systems theory applied to intermodal transportation networks. Surveys air and ground transportation infrastructure, institutional frameworks, and intermediaries promoting connections between modes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Senior in Fulton Schools of Engineering with a University Cum GPA 3.0 or greater |
| AMT | 525 | Airport Planning and Design | Completion of various phases of airport master planning process. Provides guidance for logical and timely development of airports. Project work groups assigned. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 526 | Aviation Labor Relations | Investigates labor-management relations in the aviation industry, including laws, unionism, collective bargaining, public sector relationships, grievance procedures, and conflict. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 527 | Airline Management Strategies | Since deregulation, airlines have undergone profound changes through mergers, consolidation, and acquisition. In-depth look at airline management strategies for the 21st century. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 533 | Training Systems & Simulation | Provides an overview of simulation and its various uses in aviation instruction. Three main focus areas: simulation, learning and human performance, instruction and evaluation of instructional effectiveness. Focuses on research findings in these areas and practical application and implementation of simulation to improve learning and performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AMT | 534 | Airline Pricing and Yield Management | Focuses on the fundamentals of airline economics and the volatility of industry performance at the operating level. Topics include the structure of the airline industry and the various historical and current operational strategies; demand, traffic, price and yield; operating revenues and operating costs. The airline industry is affected by various economic, environmental, political and regulatory conditions. Reviews the implications of these conditions on airline pricing, capacity, fleet selection and scheduling. Analyzes current and predicted future conditions to develop potential strategies for successful revenue management within the industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: degree- or nondegree-seeking graduate student. Credit is allowed for only AMT 534 or AMT 598 (Airline Pricing and Yield Management) |
| AMT | 541 | Aviation Physiology | Surveys human physiology and human performance principles related to modern aircraft and aircraft systems operating in multiple environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 546 | Crew Resource Management/Line-Oriented Flight Training | Evaluates in-depth, multicrew coordination issues for commercial aviation pilots. Stresses importance of critical thinking, decision making, integrated resource utilization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 565 | Safety in Complex Systems | Evaluates human error in aerospace systems. Discusses different theories of error and taxonomies as well as safety management systems to help identify hazards and risks and then help mitigate and/or eliminate them. Extensively uses case studies to highlight human failures as well as demonstrate organizational changes that resulted in safe and successful operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 570 | Unmanned Aerial Systems | Examines the system design, operations and employment of unmanned aerial systems (UAS), beginning with an overview of the system and human factors and specific issues involved with UAS design and operations. Communication, remote operations, operator display interface, and situational awareness and teamwork required for successful employment. Evaluates accident data to understand technology and human error concerns. | N | LEC | N | GNA | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AMT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Aviation Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Aviation Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| AMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) OR Fulton Polytechnic School student |
| ANB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ANB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 601 | Research Strategies in Animal Behavior | Using hands-on experiences, teaches key concepts underlying the control and function of animal behaviors and contemporary methods for measuring, analyzing, and reporting animal behaviors. Combines introductory classroom lectures on concepts and methods with direct application in observations and experiments on animal behavior in the field and the lab. Topics include communication, mating behavior and systems, parental care, kin selection, cooperation and competition, migration and dispersal, foraging, and anti-predator strategies. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 602 | Current Issues In Animal Behavior | Student-led seminar course centers on discussions of contemporary literature in the field of animal behavior. Takes a student-driven approach, with course participants selecting a target theme for the semester, selecting individual papers to discuss each week, and leading discussions about relevant merits and shortcomings of each article. Additional topics may include: conceptual frameworks and results from the dissertation projects of participating students, career options and strategies in the behavioral sciences, responsible research conduct in the field, and tactics in manuscript publication and grantsmanship. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Animal Behavior PhD student |
| ANB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ANB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 194 | Special Topics | | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ANP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| ANP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ANP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ANP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |

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| ANP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ANP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design (Energy Perform/Bldgs) MS, Building Design (Facilities Dev/Mgt) MS or Building Design (Knowledge/Compng) MS student |
| ANP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ANP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |
| ANP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design (Knowledge/Compng) MS student |
| ANP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ANP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Building Design Knowledge and Computing MS student; ANP 592 with a grade of Y |
| ANP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Building Design Knowledge and Computing MS student |
| APA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisite: Freshman status |
| APA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 200 | Introduction to Asian Pacific American Studies | Examines historical and contemporary issues facing Asian Americans and Pacific Islanders in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | |
| APA | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| APA | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| APA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| APA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 310 | Asian Pacific American Arts and Cultures | In-depth exploration of Asian Pacific American cultural expression in art, literature, film, theatre, dance, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or minimum 30 hours. Credit is allowed for only APA 310 or FMS 310 |
| APA | 315 | Asian Pacific American Literature | In-depth exploration of the literary history, critical reception, and major theories in Asian Pacific American poetry, fiction, and prose. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or 210 or 30 minimum hours |

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| APA | 330 | Asian Pacific American Genders and Sexualities | In-depth exploration of gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites:APA 200 or 210 or 30 minimum hours. Credit is allowed for only APA 330 or WST 331 |
| APA | 340 | Asian Pacific Americans and Media | Advanced study of the social construction of Asian Pacific American media images and resistance to those images in various historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| APA | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| APA | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| APA | 352 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| APA | 356 | Race and Child Development | Reviews the current research and literature about the particular role of race in child development. Even though race is not a valid biological construct, it has significant social implications as it shapes how children interact and are treated by others. Through primarily class discussions/activities, presentations and papers, addresses: (1) What are the research and theoretical issues in studying race? (2) What does race and racism mean? (3) How does race influence developmental processes? | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): APA 200 or APA 210 or 30 hours. Credit is allowed for only APA 356 or CDE 356 or APA 394 (Race and Child Development) |
| APA | 360 | Asian Pacific American Experience | Advanced study of the historical and contemporary experiences of Asian Pacific American racial/ethnic groups in the United States. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or 30 hours |
| APA | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| APA | 450 | Asian Pacific American Contemporary Issues | Advanced study of the issues shaping Asian Pacific American communities, including immigration, politics, education, health, family, gender, youth, interracial relations, and other contemporary topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |
| APA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| APA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: APA 200 or APA 210 or minimum 45 hours |
| APA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| APA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | |
| APA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| APA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 212 | Culture of Place | Explores contemporary conditions in the built environment as they are shaped by cultural phenomena. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| APH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 300 | World Architecture I/Western Cultures | Historical and contemporary built environments of Western civilizations: Mediterranean, Europe, and the Americas as manifestations of cultural history and responses to environmental determinants. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2-3 | HU & H & G | Pre-requisite: May not be Pre-Architectural Studies or Architectural Studies BSD student |
| APH | 305 | Contemporary Architecture | Europe and America from the foundations of the modern movement to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: Non-majors only (non-architecture students) |
| APH | 313 | History of Architecture I | Intensive study of history of architecture from earliest traces to 1300. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: Architectural Studies major with ALA 100 or ALA 102 and passed degree milestone review or non-majors with junior standing |
| APH | 314 | History of Architecture II | Intensive introduction to history of architecture from roughly 1300 to present day. Examines cultures from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & G & H | Pre-requisites: APH 313 with C or better |
| APH | 336 | 20th-Century Architecture I | Architecture in Europe and America from the foundations of the modern movement to the culmination of the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites: Minimum Junior standing or Digital Culture: Design major |
| APH | 337 | 20th-Century Architecture II | Developments in architecture since the international style. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisite: APH 336 |
| APH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 414 | Great Cities | Historical survey of great cities from antiquity to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | (L or HU) & H | Prerequisite(s): minimum ASU cumulative 3.00 GPA; minimum 60 hours; Credit is allowed for only APH 414 or MUD 598 (Great Cities) |
| APH | 421 | First Concepts: What is... The Writing, Philosophy, and Culture of Architecture | Examines the major writings and concepts that surround the history of architecture. Focuses on (but not exclusively) work in the 20th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L or HU | Pre-requisites: APH 313 & APH 314 with C or better; Architecture or Digital Culture Design student |
| APH | 441 | Ancient Arch | Architecture of the ancient Mediterranean world with selective emphasis on major historical complexes and monumental sites. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| APH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| APH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| APH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| APH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| APH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| APH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| APH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APH | 505 | Foundation Theory Seminar | Foundation of conceptual architectural inquiry, stressing the reciprocal and interdependent relationship between design and theory. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisites: ADE 522; ATE 556 |
| APH | 509 | Foundation Seminar | Historical, technical, theoretical, environmental, and professional issues in architecture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture; Co-requisite: ADE 510 |

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| APH | 515 | Current Issues and Topics | Critical examination of current architectural issues, topics, and discourse. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: APH 505 with a C or better; Co-requisite: ADE 621 |
| APH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 581 | Contemporary Urban Design | Explores contemporary city and urban design issues related to contemporary cities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| APH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 518 | World Englishes | Examines the implications of the global spread of English, including its diverse forms and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only APL 518 or APL 591 (World Englishes) or APL 691 (World Englishes) |
| APL | 555 | Disciplinary Discourses | Professional and disciplinary issues in linguistics and applied linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |
| APL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SHS 588 or APL 588 |
| APL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| APL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Pre-requisite: Applied Linguistics Ph.D. student |
| APL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 601 | Introduction to Applied Linguistics | Overview of the field of applied linguistics. Applies linguistic knowledge to the resolution of language-related issues facing multilingual societies (e.g., second language acquisition and ultimate attainment, literacy, language assessment, bilingualism, heritage and indigenous languages, language attitudes, language planning and policy, language and politics, world Englishes). | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| APL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 501 | Differential Equations I | Linear and nonlinear ordinary differential equations. Existence and uniqueness of solutions, limit sets, stability, Lyapunov functions, linear systems with constant coefficients. Geometry of behavior in two and three dimensions, including Poincare-Bendixson theorem, Lorenz equations, linearization, sensitive dependence on initial conditions, bifurcations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 502 | Differential Equations II | Partial differential equations, including classification, method of characteristics, separation of variables, boundary value and initial value problems, Green's functions, maximum principle, distributions, and weak solutions. Students must have already taken or be concurrently enrolled in Differential Equations I. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 503 | Applied Analysis | Convergence sequences and series of functions; metric space topology, compactness, completeness and the Ascoli-Arzelà Theorem; Contraction Mapping Principle, Implicit Function Theorem; intro to Lebesgue integration leading to L^p -spaces; properties of Hilbert spaces, Fourier transform. Students should have knowledge of linear algebra, multivariable calculus, and analysis at the undergraduate level. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 504 | Applied Probability and Stochastic Processes | Markov chains, Martingales, probability measures, SDE, Brownian motion, Monte Carlo methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 505 | Applied Linear Algebra | Fundamentals of linear algebra and numerical linear algebra, including decompositions (LU, QR, SVD), Eigen values, spectral theory, least squares problems. Programming with MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 506 | Computational Methods | Covers interpolation, solution of nonlinear equations and systems, numerical differentiation, numerical integration, numerical solution of ordinary and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 520 | Advanced Numerical Linear Algebra | Extends topics of APM 505. Introduces essential iterative methods, Gauss-Seidel, conjugate gradients. Methods for SVD, total least squares and root-finding applications in image analysis. Students should have basic knowledge of numerical linear algebra and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 522 | Numerical Methods for Partial Differential Equations | Numerical methods for parabolic, elliptic, and hyperbolic partial differential equations, including finite difference/volume, finite element, and spectral methods. Mathematical concepts of stability, consistency, and convergence. Applications to scientific, biomedical, and industrial problems. Students should have a basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 523 | Optimization | Building on a fundamental undergraduate background in linear algebra and calculus, covers continuous optimization, constrained/unconstrained and linear/nonlinear, as well as selected topics in discrete optimization. Some programming experience is needed for course projects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| APM | 524 | Spectral Methods | Extends approximation theory to global methods, including Fourier and orthogonal polynomial expansions. Applications to imaging and hyperbolic, parabolic, and elliptic partial differential equations. Students should have previous graduate courses in ordinary and partial differential equations, basic programming skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 525 | High-Performance Computing | Supercomputer architectures, parallel programming environments, languages, libraries, and algorithms for high-performance numerical simulations. Instructor/Department approval is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only APM 525, MAE 494 (High-Performance Computing) or MAE 598 (High-Performance Computing) |
| APM | 526 | Advanced Numerical Methods for Partial Differential Equations | Partial content will vary from semester to semester, but may include hyperbolic conservation laws, finite element methods, multigrid methods, and parallel algorithms for partial differential equations. Applications to scientific, biomedical, and industrial problems. Students should have basic knowledge of PDE's and a programming language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 530 | Mathematical Cell Physiology. | Mathematical modeling of dynamical aspects of cell physiology. Diffusion, membrane transport, intracellular calcium channel kinetics, calcium oscillations and waves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 531 | Mathematical Neuroscience I | Mathematical modeling of electrochemical processes in nerve cells. Dendritic modeling, dendritic spines and synaptic plasticity, bifurcation analysis of excitable membrane models, deterministic and stochastic methods for threshold dynamics and bursting, relaxation oscillations. Students should have had a previous graduate-level PDE course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 533 | Mathematical Population Biology I | Selectively covers population biology models in the forms of systems of difference equations or ordinary differential equations. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous graduate-level course in ODE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 534 | Mathematical Population Biology II | Selectively covers population biology models in the form of partial differential equations and systems. Focuses on mathematical analysis of population models as well as model formulation and simulation. Students should have a previous basic graduate-level course in ODE and PDE. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 535 | Mathematical Models in Medicine | Mathematical models for the etiology, epidemiology, pathogenesis, morphology and treatment of disease. Covers dynamical models of cancer and viral infections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 541 | Stochastic Modeling in Biology | Markov processes, random walks, martingales, branching processes, logistic growth model, Wright-Fisher model, Kingman's coalescent, bound and site percolations, contact processes, voter models. Students should have previously taken course work in probability and/or stochastic processes (or have a recommendation from their advisor). Recommendation from advisor is typically for students in biology or physics that have not taken statistics courses but have a good background in mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 553 | Dynamical Systems | Center manifolds, structural stability, normal forms, averaging, chaos, control and synchronization. Students should have a previous graduate course in ODE or applied analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 560 | Applied Dynamical Systems | Bifurcations, normal forms, pattern formations, mixing, Lagrangian chaos, and applications to fluid dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 570 | Applied Linear Operators | Bounded linear and compact operators on Hilbert spaces. Linear integral equations, Fredholm and Hilbert-Schmidt theory, and approximate methods. Distributions. Completion of a course in Applied Analysis is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 575 | Perturbation Methods in Applied Mathematics | Regular and singular perturbation methods for ordinary and partial differential equations, Boundary layer theory, matched asymptotic expansions, multiple-scale, homogenization, and WKB methods. Application to nonlinear oscillations, bifurcation and stability problems. Completion of a course in Differential Equations II or Partial Differential Equations in Engineering is strongly recommended prior to enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: APM 502 or MAE 502; Credit is allowed for only APM 575 or MAE 505 |
| APM | 576 | Theory of Partial Differential Equations I | Existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 577 | Theory of Partial Differential Equations II | Continuation of existence and uniqueness theorems, boundary value and initial value problems, characteristics, Green's functions, maximum principle, distributions, and weak solutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): APM 576 |

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|---------|-------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------|
| APM | 581 | Geometry and Control of Dynamical Systems I | Manifolds, tangent and cotangent bundle, Lie theory, integrability and controllability, and feedback control. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 582 | Geometry and Control of Dynamical Systems II | Variational principles, Euler-Lagrange equations, Hamiltonian systems, optimal control, connections and curvature. Students should have previously taken coursework in differential equations, applied analysis, applied probability, and stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP4 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| APM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARA | 101 | ASU: The Art Experience | Introduces the culture, challenges and opportunities of the School of Art. Addresses essentials for academic and personal success within the university. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 1 | | Credit is allowed for only ARA 101, 194 (ASU Art Experience) or HDA 194 (ASU Herberger Inst Experience) |
| ARA | 110 | Sculpture Safety | Introduces safety and environmental health in the sculpture studios. Pre- or corequisite for all sculpture classes. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 1 | | |
| ARA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 195 | Art in My World | Basic concepts and fundamental questions that provide insights into art making and that affect one's understanding and appreciation of art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARA | 202 | Understanding Photographs | Slide lecture course in understanding photography as a fine art form. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARA | 218 | Art and Visual Learning | Broad-ranging introduction to art and the visual world, focusing on art and artifacts from diverse cultures and eras, various two- and three-dimensional media, meaning and purpose in art, as well as community and internet art resources. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ARA 218 or 294 (Art and Visual Learning) |
| ARA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 309 | Photography Now | Explores contemporary practice through lectures, readings, exhibition visits, screenings and discussions. Explores work created within the past thirty years up to the present. Students act as a collective "ear to the ground" for the medium, engaging in first-hand experiences and research and being responsible to share those experiences with the class as active agents of discovery. Requires reading current periodicals, attending and discussing photographic lectures and exhibitions both in-class and beyond within the local community. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 2.00 GPA; minimum 45 hours. Credit is allowed for only ARA 309 or 394 (Photography Now) |
| ARA | 311 | Art Appreciation and Human Development | Foundations of art for children and young adults. Emphasizes learning, development, and understanding art in historical and cultural contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Prerequisite(s): non-ART student; ENG 101; ENG 102; minimum junior standing |

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|---------|-------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|--------------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ARA | 330 | Issues in Intermedia | Critical survey of recent theory and practice in "intermedia" art. Created specifically to provide a common historical and theoretical framework for students majoring in the intermedia area, as well as to anyone seeking to broaden his or her understanding of non-traditional media, performance, installation, computer art, video, social practice, Webart and interactivity and their relationship to contemporary society and discourse. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 216 or minimum 45 hours; Credit is allowed for only ARA 330 or ARA 494 (Issues in Intermedia) |
| ARA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARA | 396 | Professional Practices for Design and the Arts | Prepares young designers, artists and individuals in other creative fields to successfully enter the professional world of art and culture beyond the support system of the university. Through examining contemporary artists' models of practice and creative entrepreneurship, participating in hands-on exercises, field trips, engaging with guest lecturers from local cultural institutions and initiatives, student artists learn how they can shape their lives to sustain their artistic practice once they graduate. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 56 hours. Credit is allowed for only ARA 394 (Professional Practices for Artist) or ARA 396 |
| ARA | 460 | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ARA 460 or 560 |
| ARA | 460 | Gallery Exhibitions | Practical experience in all phases of department gallery operations and preparation of gallery publications. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ARA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARA | 489 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 45 hours; Credit is allowed for only ARA 489 or 494 (Writing Art and Design Criticism) |
| ARA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| ARA | 560 | Gallery Exhibitions | Provides practical experience in all phases of art gallery operations. Students learn professional art gallery practices through hands-on experience in the School of Art Student Galleries including Harry Wood, Step, and Gallery 100. Class members assist BFA and MFA candidate students in many phases of exhibition preparation and execution as well as assist with the curation and design of group exhibitions. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARA 460, 560 or 598 (Gallery Exhibitions) |
| ARA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 589 | Writing Art and Design Criticism | Arts writing workshop designed to help develop critical voice in written form. During the course of the semester, students learn about art and design criticism by reading work in a variety of contexts, looking at examples of art and design in person, analyzing and discussing them, and writing and revising their own pieces of criticism. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or non-degree seeking). Credit is allowed for only ARA 489 or ARA 589 or ARA 598 (Writing Art & Design Criticism) |

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|---------|-------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|--------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| ARA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 101 | Elementary Arabic I | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Credit is allowed for only ARB 101 or MSA 101 |
| ARB | 102 | Elementary Arabic II | Reading, writing, speaking, and understanding basic Arabic. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Credit is allowed for only ARB 102 or MSA 102 |
| ARB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 24 earned hours |
| ARB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 201 | Intermediate Arabic I | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only ARB 201 or MSA 201 |
| ARB | 202 | Intermediate Arabic II | Review of Arabic grammar with emphasis on the development of the skills of listening comprehension, reading, speaking, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only ARB 202 or MSA 202 |
| ARB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 311 | Advanced Arabic Skills I | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 321 | Arabic Conversation I | Emphasizes spoken Arabic and conversation skills. Simultaneously develops communicative skills, vocabulary, and cultural awareness. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 331 | Arabic/Islamic Culture and Literature | General introduction to the Middle East that synthesizes cultural, social, and literary information. Focuses on the experiences of ordinary Middle Eastern people to convey a grassroots sense of the Middle East. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 335 | Arabic Culture and Islam | Develops awareness of Arabic culture and Islam. Covers a variety of cultural topics, including family, status of women, food, music, and Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| ARB | 336 | Introduction to the Qur'an | Introduces the Qur'an and examines the historical, contextual, religious and interpretive dimensions wherein the Qur'an developed. Deals with the structure of the Qur'an, the different sections, suras (Qur'anic chapters), and some of the verses. Also includes an introduction to the idea of revelation, its history, the content and some of the different themes of the Qur'an, and discusses aspects of the Qur'an as a source of law. Taught in English; requires no knowledge of Arabic or Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better; Credit is allowed for only ARB 336 or 394 (Introduction to the Qur'an) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARB | 337 | Hadith and Prophetic Tradition | Considers the Hadith as a literary text and as the prophetic tradition in Islam. Focuses on the development of the Hadith as a vast subject in Arabic literature, its collection methodology, Hadith science, and its contents. Gives special attention to the relationship of the Hadith as the second source, after the Qur'an, of Islamic knowledge, Islamic theology, Islamic philosophy and Islamic law. Explores the various ways and approaches in which Muslims employ the Hadith along with the Qur'an in their search for meaning, identity and knowledge. All readings are in English; requires no prior knowledge of Arabic language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 101, ENG 105, or ENG 107 with C or better; Credit is allowed for only ARB 337 or 394 (Arabic Hadith and Prophetic Tradition) |
| ARB | 341 | Quran Text and Women | Addresses Muslim women scholars' argument that it is not the religion but the patriarchal interpretation of the Quran that have kept Muslim women oppressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 351 | Classical Arabic Literature | Provides a survey in classical Arabic literature. Focuses on the development of classical Arabic poetry and prose since their interceptions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 352 | Modern Arabic Literature in Translation | Surveys the major trends, themes and genres of modern Arabic literature in translation. Provides a foundational knowledge of modern literature in the Arabic language. Focuses on continuity and change, cultural diversity and multiplicity in the Middle East, and the social, religious and historical aspects of modern Arab culture. No knowledge of Arabic language is required for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only ARB 352 or 394 (Introduction to Modern Arabic Literature) |
| ARB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 411 | Advanced Arabic Skills II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 421 | Arabic Conversation II | Focuses on developing all four skills of the Arabic language acquisition: reading, writing, listening, and speaking. Aims to help students acquire an advanced proficiency in Arabic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ARB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ARB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ARB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ARB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARB | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARE | 250 | Teaching Inquiry in Art | Issues in teaching and learning through directed, guided, and independent inquiry about artworks and through art making. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 101, ARS 102, and 6 hours (2 classes) from ART 111, 112, 113 or 115 with a C or better or currently enrolled |
| ARE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 301 | Studio Art and Human Development | Study of human development in studio art from early childhood to adult years. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARE | 370 | Teaching Visual Culture | Explores issues and applications of everyday aesthetics that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA or BFA Art major: ARE 250 OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 or ARS 102; ART 110; ART 112 (or ART 113, 115 or 116) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 440 | Interdisciplinary Art Education | Explorations in art education's disciplines, history, and people's artmaking development at diverse age levels and abilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BIS Interdisciplinary Studies (Studio Art concentration) or Herberger Institute major or Studio Art minor; minimum 2.00 GPA; minimum 55 hours |
| ARE | 446 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |
| ARE | 482 | Teaching Art Processes | Art traditions of the 20th century as a basis for studio and art history instruction. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Fine Arts Art student |
| ARE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARE | 486 | Art Education: Strategies and Applications | Implementation and evaluation of art instruction for K-12 population. Includes teaching of Saturday classes in the Children's Art Workshop. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 482 with C or better |
| ARE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARE | 496 | Methods and Assessment of Learning in Art | Individual or group research on the assessment of art learning incorporating theory and practice. Meets art postbaccalaureate certification requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Art student; ARE 250 with B- or better |
| ARE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ARE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisites: Minimum 90 hours |
| ARE | 510 | Visual Culture Research | Research on instruction of everyday aesthetics and related issues that contain powerful technological, social, and economic factors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 520 | Issues in Teaching Inquiry in Art | Issues in teaching and learning focused both on inquiry about artworks and on inquiry through art making. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 525 | Research on Art Instruction | Research methods and assessment of learning in art. Pilot studies on the effects of instruction on learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 530 | Issues in Teaching Studio Art | Critical examination of issues concerning teaching multicultural art to different populations of students. Historical and philosophical foundations reviewed. Recommended to be taken before ARE 535. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 535 | Research on Teaching Studio Art | Review of empirical and historical research methods, learning theory, and assessment of learning in studio art, including developmental studies and their limitations. Pilot studies on the effects of instruction upon learning. Recommended to be taken after ARE 530. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 540 | Teaching Art in Cultural Contexts | Relationship of multicultural perspectives to teaching/learning art criticism, aesthetics, studio art, and art history. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 546 | Multicultural Issues in Art Education | Explores multicultural issues, ethnicity and cultures related to art and education. Discussion course on facts and sometimes controversial interdisciplinary materials draws upon knowledge from various disciplines. Emphasizes art educational issues and teaching. Also explores and analyzes international and global issues concerning multiculturalism. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only ARE 446, 494 (Multicultural Issues in Art Education), 546 or 598 (Multicultural Art Education) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ARE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |

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| ARE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 451 | Architecture Field Studies | Organized field study of architecture in specified national and international locations. Credit/no credit. May be repeated for credit with director approval. | N | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | |
| ARP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: ADE 322 with a C or better; Co-requisite: ADE 421; ATE 451 |
| ARP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ARP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| ARP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ARP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Master of Architecture student; ADE 522 with a C or better |
| ARP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |

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| ARP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ARP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Architecture student |
| ARS | 100 | Introduction to Art | Provides an introduction to the understanding and enjoyment of art through the study of painting, sculpture, design, photography, and the decorative arts. Students gain an awareness of meaning, functions, and significance of art, while learning an art-related vocabulary and a set of analytical tools for discussing and understanding art from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art majors; Credit is allowed for only ARS 100, 101, 102, or 300 |
| ARS | 101 | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 101 | Art from Prehistory Through Middle Ages | History of Western art from the Paleolithic period through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | 102 | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | |
| ARS | 102 | Art from Renaissance to Present | History of Western art from the Renaissance to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| ARS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ARS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 201 | Art of Asia | History of the art of the Asian cultures, with emphasis on China, Japan, and India. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 202 | Art of Africa, Oceania, and the Americas | History of art of Africa, Oceania, and the New World. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | |
| ARS | 250 | History of Photography | History of photography from the 19th century to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | |
| ARS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 300 | Introduction to Art | Parallels ARS 100 course content but requires a higher level of accomplishment and comprehension. Introduces visual culture, the purpose of art, and the relationship between art and visual culture. Students learn how visual culture pervades our everyday lives and how understanding visual literacy can help us participate more fully in the world around us. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Non-Art major: Minimum 55 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 100, 101, 102 or 300; Graphic Design majors: Minimum 2.00 GPA; Minimum 55 hours; Graphic Design majors with credit for ARS 100 may not enroll in ARS 300 |
| ARS | 302 | Art/ Africa, Oceania & Americas | Issues in the art of Africa, Oceania, and the Americas related to ritual, gender, transformation of tradition, and encounters with Europeans. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H & G | Pre-requisite: ENG 102, 105, or 108 |
| ARS | 310 | The Renaissance in Tuscany | Course taught in Florence, Italy. History of arts in Tuscany with focus on city of Florence from 14th through 16th centuries. Completion of ARS 101 and 102 suggested. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARS | 330 | The Portrait | Examines the history and production of portraits in contexts of social hierarchies, historical events, gender, politics, class, morality and aesthetics with a focus on the 15th to the 21st centuries in painting, sculpture and photography. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Prerequisite(s): Any 200-level or higher course in APH, ARS, ENG, FMS, HST, MHL with B or better; Credit is allowed for only ARS 330 or 394 (Genre: Portraits) |
| ARS | 340 | Art in America | American art from colonial times through the Second World War. Not available to students who have completed ARS 542. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101. Credit is allowed for only ARS 340 or 542 |
| ARS | 345 | Art and Television | Critical introduction to the interrelation of technology and visual art using the tools of art history and media/cultural studies. Students read theorists of the relation between visual art and the mass media, and use them to analyze early presentations of visual art and art history on television of the 1960s and 1970s. Examines the contemporaneous and parallel development of video art--an artistic medium appropriated from television technology--through the study of key video artworks. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: minimum 2.00 GPA; minimum 45 earned hours; Credit is allowed for only ARS 345 or ARS 394 (Art & Television) |
| ARS | 362 | Pre-Columbian Art I | Architecture, sculpture, ceramics, painting, and other arts of Mesoamerica before European contact. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARS | 402 | Art of Ancient Egypt | Aesthetic, philosophical, and cultural basis of Egyptian art from pre-Dynastic period through New Kingdom. Emphasis on sculpture and architectural monuments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101 or ARS 102 with C or better; Credit is allowed for only ARS 402 or 502 |

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| ARS | 404 | Greek Art | History of art, architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s): ARS 101 with C or better; Credit is allowed for only ARS 404 or 504 |
| ARS | 406 | Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: BA or BFA Art major: ARS101; ARS 102 with C or better OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor: ARS 101 |
| ARS | 410 | Early Christian and Byzantine Art | Art and architecture of the early church and the Byzantine Empire from the 4th to the 15th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 412 | Early Medieval Art | Painting, sculpture, architecture, and the minor arts from Migration, Carolingian, and Ottonian periods considered within religious, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better |
| ARS | 414 | Romanesque Art | Sculpture, painting, architecture, and minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 414 or ARS 514 |
| ARS | 416 | Gothic Art | Painting, sculpture, and architecture in western Europe during the Gothic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 417 | Late Gothic Art in Central Europe | Sculpture, painting, and architecture of the late-Gothic style, ca. 1350-1525, considered within religious, social, economic, and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 417 or ARS 517 |
| ARS | 418 | German Renaissance and Reformation Art | Graphics, painting, sculpture, and architecture, ca. 1450-1550. Reformation themes and Renaissance style considered within religious, political, social, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | ARS 101 (or ARS 102) OR any 200-level or higher course in ASB, ENG, FRE, GER, HST, ITA or REL with B- or better. Credit is allowed for only ARS 418 or ARS 598 (German Renaissance and Reformation Art) |
| ARS | 422 | Italian High Renaissance Art and Mannerism | History of Italian art during the 16th century, including the achievements and influence of Leonardo da Vinci, Raphael, and Michelangelo. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 422 or 522 |
| ARS | 424 | Italian Baroque Art | Italian painting, sculpture, and architecture of the 17th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 101; ARS 102 |
| ARS | 426 | Art of the 17th Century in Northern Europe | Baroque painting, sculpture, and architecture in Flanders, the Netherlands, France, and England. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 434 | Art and Visual Culture of 19th Century | History of European art (all media) from French Revolution to Paris World Fair of 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: At least one course in APH, ARS, ENG, FMS, HST or MHL with B or better; Credit is allowed for only ARS 434 or 534 |
| ARS | 435 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 436 | The Artist, War, and Revolution (Versailles to Vietnam) | Critical study of artistic responses to war and revolution in Europe and United States from French Revolution to Vietnam conflict. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 438 | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | 438 | Art of the 20th Century I | Developments and directions in art between 1900 and World War II. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisite: ARS 102 with B- or better or one course in ARS, ENG or HST at 200 level or higher with B or better |
| ARS | 439 | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | 439 | Art of the 20th Century II | Art since World War II, with consideration of new concepts and experimentation with media and modes of presentation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: ARS 102 or ARS 438 with B- or better; Credit is allowed for only ARS 439 or ARS 539 |
| ARS | 440 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 55 hours; At least one 200-level course in literature, art history, history, OR film and media studies with a grade of B- or better; Credit allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| ARS | 441 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Also considers historical precedents, including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 442 | Critical Issues in American Painting | Explores issues of national identity and western expansion, Manifest Destiny, through images of race and violence in western American painting from 1800 to the early 20th century. Includes "claiming and settling the wilderness," cultures in conflict, the cowboy, and visions of an enchanted land. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 442 or 542 |

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| ARS | 443 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| ARS | 444 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| ARS | 451 | 20th Century Photography | Personalities, processes, images, and ideas in photography from 1914 to present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ARS | 456 | Introduction to Museums | Examines the history and the critical issues they face. Acquaints students with the basic functions of specific museum departments and staff, including the role of director, curator, registrar, preparator, as well as fund raising, marketing, audience development, education, exhibitions, conservation, ethics, cultural/heritage tourism and public art. Guest speakers and field trips enhance classroom instruction. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ARS 101 or ARS 102 OR any 200-, 300- or 400-level course in ASB, ENG or HST with B- or better |
| ARS | 458 | Critical Theories in the Visual Arts | Examines current critical theories through their application to all visual arts. May include new historicism, Marxism, deconstruction, post-structuralism, semiotics, Lacanian psychoanalysis, feminism, postmodernism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 459 | Writing Art Criticism | Traditional and contemporary approaches to the criticism of art. Students write critical essays. Latter half of the semester stresses the criticism of contemporary art in various media. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: ARS 458 |
| ARS | 460 | Art Now | Critical overview of major issues and controversies of the last 10 years within the global, national, and local art scene. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: ARS 102 with B- or better or one course in ARS, ENG or HST at the 200 level or higher with B or better; Digital Culture major |
| ARS | 465 | Native Art of North America | Native American art forms of the United States and Canada from prehistoric times to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 465 or 565 |
| ARS | 466 | Native American Art of the Southwest | American Indian art in the southwestern states from its origins to the present day. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 468 | Art of the Arctic and Northwest Coast | Art associated with ceremony, shamanism, and daily life in the Arctic and on the Northwest Coast. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU & C & H | Pre-requisites: Minimum 45 hours; Minimum 2.0 GPA |
| ARS | 469 | Mexican Art | Art of Mexico and related Central American cultures from the prehistoric to the contemporary schools. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: ARS 101; ARS 102 |
| ARS | 472 | Art of China | Study of major forms in Chinese art: ritual bronze, sculpture, ceramic, calligraphy, painting, and architecture. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA |
| ARS | 473 | Art of Japan | Japanese art from the Joman period to the present. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisite: Minimum 55 hours; Credit is allowed for only ARS 574 or ARS 473 |
| ARS | 475 | Chinese Painting | From Ku K'ai-chin to Chi Pai-shih. Major artists, styles, and movements in Chinese painting. Meets non-Western art history requirement. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | HU | Pre-requisites: Minimum 50 hours; Minimum 2.00 GPA; Credit is allowed for only ARS 475 or 575 |
| ARS | 480 | Research Methods | Methodology and resource material for art historical research. Techniques of scholarly and critical writing and evaluation of bibliographic sources. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: Museum Studies or Art History student; Junior standing; ARS 101 and ARS 102 with B- or better |
| ARS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | |
| ARS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ARS | 485 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | L | Pre-requisites: ARS 101; ARS 102; Credit is allowed for only ARS 485 or 585 |
| ARS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ARS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ARS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ARS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ARS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |

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| ARS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ARS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-3 | | Pre-requisite: Minimum 90 hours |
| ARS | 501 | Methodologies and Art History | History of the discipline and an exploration of various methodologies, critical theory, and bibliographies used by art historians. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 502 | Critical Studies in Egyptian Art | Egyptian art from pre-Dynastic to New Kingdom periods. Focus on aesthetic, philosophical, and cultural contexts. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 402 or 502 |
| ARS | 504 | Critical Approaches to Greek Art | Art and architecture of Aegean civilizations (Cycladic, Minoan, Mycenaean) and of Greece to end of Hellenistic period. Research paper and readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 404 or 504 |
| ARS | 506 | Critical Studies in Roman Art | Art and architecture of Etruria, the Roman Republic, and the Roman Empire. Research paper and/or supplemental readings required. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 514 | Critical Approaches to Romanesque Art | Sculpture, painting, architecture, and the minor arts in western Europe, ca. 1030-1200, considered within religious, economic, and social contexts. Requires research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 414 or 514 |
| ARS | 533 | The Pre-Raphaelites | Explores Pre-Raphaelite culture, both literature and art, and relevant social history, from the Pre-Raphaelite Brotherhood through Aestheticism and early twentieth century, focusing on interactions between images and texts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ARS | 534 | Art and Visual Culture of the 19th Century | Critical study of visual arts using primary source material from mid-19th century to WWI within philosophical, socioeconomic, and economic contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 434 or 534 |
| ARS | 538 | Art of the 20th Century I | Charts how the avant-garde in the early 20th century developed different strands of modern art as it sometimes grew closer to, and at other times veered away from, radical politics. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 438, 538 or 598 (Art of 20th Century I) |
| ARS | 539 | Art of the 20th Century II | General introduction to major trends and issues of Euro-American art created between 1955 to around the turn of the 21st century. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for either ARS 439 or ARS 539 or ARS 598, Art of 20th C |
| ARS | 540 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| ARS | 541 | Public Art | Explores the lively field of contemporary public art, particularly as defined by percent-for-art programs established through city ordinances during the last forty years. Considers historical precedents including Civil War monuments and the City Beautiful Movement. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 441, 498 (Public Art), 541 or 591 (Public Art) |
| ARS | 542 | Critical Issues in American Painting | Explores themes and social issues in American art with a critical study of American painting from the 18th century to 1850. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 340, 442 or 542 |
| ARS | 543 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (genius, deviant, etc.); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ARS 443 or ARS 543 or FMS 430 or FMS 543 or ARS 598 (Artists in Film: Biopics) |
| ARS | 544 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Credit is allowed for only ARS 444, ARS 544, ARS 598 (Films of India) or FMS 426 |
| ARS | 565 | Native Art of North America | Critical examination of Native American art within culture, prehistory to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 465 or 565 |
| ARS | 574 | Studies in Japanese Art | Critical examination of the nature and history of Japanese art, its rich heritage and its indebtedness to foreign sources. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 473 or 574 |
| ARS | 575 | Approaches to Chinese Painting | Critical history of Chinese painting from Eastern Chou to 1911. Emphasis on masters, regional developments, and conceptual underpinnings. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Minimum 108 hours; Senior or Postbaccalaureate Undergraduate or Graduate; Credit is allowed for only ARS 475 or 575 |

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| ARS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 585 | Women in the Visual Arts | Historical study of art by women in various media; related social, political, educational issues; representation of women in art. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ARS 485 or 585 |
| ARS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Seniors or Post Bacc undergraduates with minimum of 108 earned hours |
| ARS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ARS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ARS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 110 | Drawing as Seeing and Thinking | Immerses students from a broad range of non-art disciplines in the practice of drawing. Considers and reflects on drawing in its most expanded form: as a primary tool of communication and creative problem solving, as movement, as sensory experience and as its own unique method of cognition. Divides class meetings among lectures, exercises, field excursions and opportunities for critical dialogue. Students leave with an appreciation of the unique power of mark-making and an improved understanding of its application in their lives. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | HU | Credit is allowed for only ART 110 or 194 (Drawing as Seeing and Thinking) |
| ART | 111 | Drawing I | Fundamental, technical, and perceptual skills using common drawing media and their application to pictorial organization. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 112 | 2-D Design | Fundamentals of pictorial design. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 110 or ART 111 or ART 112 or ART 113 or ART 114 or ART 115 or ART 116 or ART 117 or ART 118 or ART 119 or ART 120 or ART 121 or ART 122 or ART 123 or ART 124 or ART 125 or ART 126 or ART 127 or ART 128 or ART 129 or ART 130 or ART 131 or ART 132 or ART 133 or ART 134 or ART 135 or ART 136 or ART 137 or ART 138 or ART 139 or ART 140 or ART 141 or ART 142 or ART 143 or ART 144 or ART 145 or ART 146 or ART 147 or ART 148 or ART 149 or ART 150 or ART 151 or ART 152 or ART 153 or ART 154 or ART 155 or ART 156 or ART 157 or ART 158 or ART 159 or ART 160 or ART 161 or ART 162 or ART 163 or ART 164 or ART 165 or ART 166 or ART 167 or ART 168 or ART 169 or ART 170 or ART 171 or ART 172 or ART 173 or ART 174 or ART 175 or ART 176 or ART 177 or ART 178 or ART 179 or ART 180 or ART 181 or ART 182 or ART 183 or ART 184 or ART 185 or ART 186 or ART 187 or ART 188 or ART 189 or ART 190 or ART 191 or ART 192 or ART 193 or ART 194 or ART 195 or ART 196 or ART 197 or ART 198 or ART 199 or ART 200 or ART 201 or ART 202 or ART 203 or ART 204 or ART 205 or ART 206 or ART 207 or ART 208 or ART 209 or ART 210 or ART 211 or ART 212 or ART 213 or ART 214 or ART 215 or ART 216 or ART 217 or ART 218 or ART 219 or ART 220 or ART 221 or ART 222 or ART 223 or ART 224 or ART 225 or ART 226 or ART 227 or ART 228 or ART 229 or ART 230 or ART 231 or ART 232 or ART 233 or ART 234 or ART 235 or ART 236 or ART 237 or ART 238 or ART 239 or ART 240 or ART 241 or ART 242 or ART 243 or ART 244 or ART 245 or ART 246 or ART 247 or ART 248 or ART 249 or ART 250 or ART 251 or ART 252 or ART 253 or ART 254 or ART 255 or ART 256 or ART 257 or ART 258 or ART 259 or ART 260 or ART 261 or ART 262 or ART 263 or ART 264 or ART 265 or ART 266 or ART 267 or ART 268 or ART 269 or ART 270 or ART 271 or ART 272 or ART 273 or ART 274 or ART 275 or ART 276 or ART 277 or ART 278 or ART 279 or ART 280 or ART 281 or ART 282 or ART 283 or ART 284 or ART 285 or ART 286 or ART 287 or ART 288 or ART 289 or ART 290 or ART 291 or ART 292 or ART 293 or ART 294 or ART 295 or ART 296 or ART 297 or ART 298 or ART 299 or ART 300 |
| ART | 113 | Color | Principles of color theory as related to the visual arts. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 115 | 3-D Design | Fundamentals of 3-D form. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 116 | Introduction to Digital Media | Concentrates on the fundamentals of digital media, including imagery, sound, video, animation, and the Web. Assignments are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques and software as they become familiar with contemporary artistic processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 116 or 194 (Introduction to Digital Media) |
| ART | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | |
| ART | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 201 | Photography I | Development of skills and techniques of black and white photography. Emphasis on camera work and darkroom procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 202 |
| ART | 202 | Photography I Lab | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 0 | | Corequisite(s): ART 201 |
| ART | 204 | Photography II: Black and White | Photography as an art medium with additional exploration into personal photographic aesthetics. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 205 | Photography II: Color | Uses both film and digital capture to explore color photography in depth. Emphasizes computer editing and printing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 201, 202 |
| ART | 211 | Drawing II | Continued development of technical and perceptual skills. Emphasizes materials and pictorial content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 214 | Life Drawing I | Development of skill and expressiveness in drawing the basic form, construction, and gesture from the human figure. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 112 with C or better |
| ART | 216 | Intermedia Practices | Investigates the multidisciplinary practice of Intermedia within a fine art context and functions as a bridge between foundation courses and the Intermedia degree area specialty. Relying on principles and techniques from foundation level classes, students learn to choose appropriate media for a particular idea and construct work that is concept-driven and incorporates cross-disciplinary approaches. Students develop individual and diverse approaches to fusing traditional art disciplines with experimental, performative, spatial, and digital technologies. Students explore the full range of options available to contemporary artists and discuss the ever-shifting definition of intermedia and new media. Students may work in media including drawing, photography, mixed media, video, sculpture, networked, multimedia, electronic arts, digital sound manipulation, image processing, performance, and installation. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/corequisite(s): ART 113, 116 or 194 (Intro to Intermedia) with C or better; 2 from ART 111, 112 or 115 with C or better OR Art Digital Culture major; ART 111, 112 or 113 with C or better; credit for only ART 216 or 294 (Intermedia Practices) |

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| ART | 218 | 3D Tools | Introduces 3D data capture, 3D modeling and rendering, and 3D prototyping and fabrication through creative/research activities using CNC and rapid prototyping tools. Projects are given to engage students in the technical, conceptual, and aesthetic aspects of digital media. Students employ a diverse range of techniques, software tools, and hardware in the course of making their creative/research projects, becoming familiar with contemporary artistic and engineering processes involving the use of the computer and/or other technologies. Consists of hands-on experimentation and production supplemented by slide lectures, videos, visiting artists, and academic research. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Credit is allowed for only ART 218 or 294 (3D Tools) |
| ART | 223 | Painting I | Fundamental concepts and materials of traditional and experimental painting media. Emphasizes preparation of painting supports, composition, and color. Lab. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 113 with C or better |
| ART | 227 | Watercolor I | Fundamental concepts, materials, and techniques of watercolor. Emphasizes problem solving, basic skills, composition, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART major: ART 111 with C or better; ART 113 with C or better, OR Studio Art minor or BIS Studio Art emphasis: ART 110 with C or better |
| ART | 231 | Sculpture I | Explores sculptural forms through concepts related to basic materials. Focus on studio production, safety, aesthetic criticism, and history of sculpture. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 111 and ART 115 with C or better |
| ART | 253 | Introduction to Printmaking | Introduces basic monotype, intaglio, relief, and related techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 113 with C or better |
| ART | 261 | Ceramic Survey | Handforming methods, throwing on the wheel, decorative processes, and glaze application. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; ART 112 and ART 115 with C or better |
| ART | 272 | Introduction to Metals and Jewelry | Emphasizes metal fabrication. Basic techniques of cutting, piercing, forging, soldering, and forming of non-ferrous metals. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art undergraduate student; maximum junior standing; ART 112 and ART 115 with C or better |
| ART | 274 | Wood I | Fundamental woodworking techniques to produce creative functional 3-D objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 276 | Fibers I | Explores traditional and contemporary materials and basic techniques related to fibers. Embroidery, feltmaking, dyeing, block printing, plaiting, 3-D structures. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 112, 115; undergraduate Art major; maximum junior standing OR The Arts (Fashion Design) major with ART 110 with C or better |
| ART | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 301 | Alternative Processes | Recognition Alternative Processes of the inherent characteristics of nonsilver processes and their use in communicating ideas. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major with completed portfolio; ART 204 with C or better |
| ART | 304 | Junior Photographic Projects | Interpretation and manipulation of light as a tool in the performance of expressive photography. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; completed portfolio milestone (if required); ART 204 (and ART 101, ART 201) with C or better |
| ART | 307 | View Camera | View camera and darkroom techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART204 (and ART101, ART201) with C or better |
| ART | 311 | Drawing III | Emphasizes composition and exploration of drawing media. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major or completed studio milestone; ART 211 with C or better or Studio Art Minor or BIS (Studio Art); ART 110 with C or better; ART 112 with C or better |
| ART | 314 | Life Drawing II | Drawing from the model with greater reference to structural, graphic, and compositional concerns. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: ART 110, 112, 214 (or Studio Art concentration or minor); Art student or completed portfolio milestone |
| ART | 323 | Painting II | Development of competency in skills and expression. Assigned problems involve light, space, color, form, and content. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio; ART 223 with C or better OR Studio Art minor: ART 110 with C or better; ART 113 with C or better |
| ART | 325 | Figure Painting | The human figure clothed and nude as the subject for painting in selected media. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 214 and ART 323 with C or better |
| ART | 327 | Watercolor II | Explorations of personal expression in watercolor. Continued development of watercolor skills using traditional and experimental materials and techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 227 with C or better |
| ART | 331 | Sculpture II | Emphasizes metal fabrication as an expressive sculptural process. Techniques in welding, cutting and bending of metals and their aesthetics. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major or completed studio milestone: ART 231 with C or better OR BIS (Studio Art) or Studio Art minor: ART 110, 115 with C or better |
| ART | 332 | Sculpture III | Explores diverse media with a focus on mold-making processes. Development of the sculpture portfolio. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 331 with C or better |
| ART | 333 | Foundry Casting Methods | Fine art and techniques of metal casting: mold making, foundry safety, finishing techniques, application of patinas, and history of casting. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 332 with C or better OR Studio Art minor; ART 110 and 115 with C or better |
| ART | 345 | Visualization and Prototyping | Studio/seminar introduces concepts of computer visualization, modeling, and rapid prototyping in an interdisciplinary manner. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Digital Art OR Intermedia student |

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| ART | 346 | 3-D Computer Imaging and Animation | 3-D modeling and animation. Emphasizes concepts and fine arts applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | CS | Prerequisite(s): ART major or Digital Culture (Art) major; ART 111, ART 112 or ART 113 with a 'C' or better OR Minor in Studio Art (HISTARTMIN); ART 110 with a 'C' or better, and ART 112 or ART 113 or ART 115 or ART 116 with a 'C' or better. |
| ART | 348 | Animation Motion Studies | Principles and applications of 3-D animation for fine arts. Emphasizes animation techniques for expressive effects. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 with C or better |
| ART | 351 | Intaglio I | Introduces concepts and techniques of intaglio processes, including non-acid and acid techniques such as drypoint, line etch, aquatint, photo etching; introduces multiple plate printing ala poupee wiping, chine colle, and basic color. Idea-generating exercises include visual signifiers of identity, democratic multiple, time and space, the disembodied gaze, and reconsidering beauty. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 352 | Lithography I | Monochromatic and color planographic printmaking utilizing stone and aluminum plate processes. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better |
| ART | 354 | Screen Printing I | Introduces paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; two from ART 111, 112, 113 with C or better OR Studio Art minor; ART 110 with C or better; ART 112 or 113 with C or better |
| ART | 360 | Ceramic Throwing | Design analysis and production of functional pottery. Emphasis on throwing techniques, surface enrichment, and glaze application. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s) with C or better: BA Art major: ART 261 OR Studio Art minor (or BIS Studio Art emphasis); ART 110 and 115 |
| ART | 364 | Ceramic Handbuilding I | Search for form using handbuilding techniques. Kiln firing and related problems. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |
| ART | 365 | Ceramic Handbuilding II | Continuation of ART 364 with an additional focus on large-scale works, surface treatments, and glaze decoration with related kiln firing applications. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and 364 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 364 with C or better |
| ART | 372 | Casting and Jewelry Techniques | Covers lost wax casting for jewelry scale work and alternative casting methods and mold making as well as other techniques such as chain making and marriage of metals. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 373 | Form Emphasis in Metals | Covers forming non-ferrous metals using techniques such as anticlastic and sinclastic forming, raising, fold forming. Projects focus on hollow forms using these various techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better |
| ART | 374 | Wood II | Individual and directed problems in wood related to the production of unique functional art objects. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 with C or better |
| ART | 376 | Woven Structures I | Explores weaver- and loom-controlled structures with an emphasis on formal issues, historic precedence, and contemporary investigations. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |
| ART | 377 | Surface Design | Application of dyes and pigments on cloth exploring techniques, formal issues, and content. Cyanotype, monoprinting, painting on silk, resists, stenciling. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 276 with C or better OR Studio Art minor; ART 110 with C or better; ART 112, 113, 115 or 116 with C or better |
| ART | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | 403 | Senior Photographic Projects | Technical and philosophical refinement of personal aesthetic with various photographic media. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 404 | Portraiture Photography | Photographing people. Critical discussions and slide lectures on issues in portraiture. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 204 (and ART 101, ART 201) with C or better |
| ART | 408 | Experimental Film | Facilitates the exploration of 16 mm motion picture film as material and methodological fodder for artists. Students use original, found, and hand-altered footage to create projects of their own design. Covers basic techniques including camera operation, film exposure, and analog editing practices. Explorations also include in-class experiments, readings, discussions and screenings. For upper-division undergraduate and graduate art students attracted to the material and theoretical issues embodied in film and who are curious about how film might inform their own ongoing advanced artistic pursuits. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): minimum 3.00 GPA; minimum 45 hours. Credit is allowed for only ART 408 or ART 508 |
| ART | 409 | Photographic Exhibition | Care of photographic prints, print presentation, and exhibition. Practical experience in gallery operations. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 410 | Landscape Photography | Photographing landscapes. Critical discussion and presentations on issues in landscape photography. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | |
| ART | 411 | Drawing IV | Visual and intellectual concepts through problem solving and independent study. Emphasis on the individual creative statement. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 211 and ART 311 with C or better |
| ART | 414 | Life Drawing III | Various media and techniques on an advanced level. The human figure as an expressive vehicle in various contexts. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 314; credit is allowed for only ART 414 or ART 514 |

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| ART | 423 | Painting III | Further exploration of techniques and concepts of painting. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 223 with C or better; ART 323 with C or better; Art major; credit is allowed for only ART 423 or 523 |
| ART | 425 | Advanced Figure Painting | The human figure clothed and nude as the subject for painting in selected media. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 223, 323 and 314 with C or better; credit is allowed for only ART 425 or 525 |
| ART | 427 | Art on Paper | Advanced techniques, concepts, and processes with water media and mixed painting and drawing media on paper. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute student: min 55 hours; min 2.00 GPA or BIS Studio Art emphasis or Studio Art minor; ART 110 and ART 112 (or ART 113, 115, 116) with C or better; min 2.00 GPA; min 45 hours. Credit is allowed for only ART 427 or 527 |
| ART | 428 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: BA or BFA Art major; ART 231 with C or better; Credit is allowed for only ART 428, 494 (New Systems-Sculpture) or 528 |
| ART | 431 | Special Problems in Sculpture | Development of a personal approach to sculpture. Emphasis on form, individual problems, and related color technology. Professional practices and presentation. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231, ART 331 and 332 with C or better |
| ART | 432 | Neon Sculpture | Techniques for creating neon in an art context. Glass tube bending and fabrication. Construction of artworks utilizing light-generating gasses. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better or BIS Studio Art emphasis or Studio Art minor; ART 110 and 115 with C or better |
| ART | 433 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Requires participation in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Provides a history of the use of cast metal in the visual arts and an understanding of how casting processes can be applied to contemporary sculptural concepts. Requires participation in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre/Corequisite(s): ART 332 with C or better |
| ART | 435 | Foundry Research Methods | Research in foundry techniques. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): minimum 45 hours |
| ART | 436 | Architectural Sculpture | Sculptural concepts as related to architecture and other man-made environments. Scale drawing, models, and relief sculpture. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 231 with C or better; ART 331 with C or better; ART 332 with C or better |
| ART | 437 | Film Animation | Production of short 16mm films that feature articulated sculptural objects, models, dolls, puppets, and graphics through the use of single-frame filming techniques. 6 hours a week. May be repeated for credit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better |
| ART | 438 | Moving and Interactive Systems in Sculpture | Explores new tools in digital fabrication, multipart constructions and digitally manipulated surfaces. Earmarks exploration regarding fabrication with computer numerically controlled lasers, plasma cutters and routers. Regular technique demonstrations, slide lectures and hands-on studio work. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 231 with C or better; Credit is allowed for only ART 438 or 538 |
| ART | 439 | Intermedia Studio | Exploring visual effects by combining traditional and nontraditional methods, techniques, and concepts. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Digital Culture (Art) student; ART 111, ART 112 or ART 113 with C or better or Studio Art minor (or BIS Studio Art emphasis), ART 110 and 116; credit is allowed for only ART 439 or 539 |
| ART | 440 | New Media Concepts | Continued experiments with new media and interdisciplinary concerns in art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Corequisite(s): ART 441 |
| ART | 441 | Video Art | Utilizing video and audio equipment essential to the production of broadcast quality video art. 2 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): Art portfolio completed; corequisite ART 440 |
| ART | 442 | Art and Community | Explores through studio practice, research and presentations intermedia social art practice, public practice, art/life practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 45 hours or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit is allowed for only ART 442 or 494 (Art and Community) |
| ART | 443 | Intermedia Performance | Experimental, conceptual, and interdisciplinary studio art with emphasis on performance and new media practices. May be repeated once for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or Studio Art minor (or BIS Studio Art emphasis); ART 110 and 116 with C or better; credit allowed for either ART 443, 543 or 598 (Intermedia Performance) |
| ART | 444 | Web Art | Explores Web technology as a medium to create interactive art works for the Internet. Concept-driven curriculum wherein the idea for each work and its development is emphasized. The technical aspect of the work supports the concept. Students create storyboards and flowcharts to facilitate the application of the concept to the technology. The technical emphasis is on interactivity and time-based Net art. Students use existing software, learning the interface and programming associated with the software. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Intermedia majors eligible for upper-division credit; credit is allowed for only ART 444 or 494 (Web Art) |

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| ART | 445 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques, including image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): 50 minimum hours; credit is allowed for only ART 445 or 494 (Digital Process for Print) |
| ART | 449 | Computer Animation and Video | Integrates 3-D fine arts animation with video and compositing. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 346 and ART 348 with C or better |
| ART | 451 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spit bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351 with C or better; credit is allowed for only ART 451 or 551 |
| ART | 452 | Advanced Lithography | Continuation of ART 352. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student or completion of portfolio milestone; ART 253 and ART 352 with C or better |
| ART | 453 | Experimental Printmaking: Expanding the Matrix | Alternative methods of working with print techniques, including installations, actions or performances, and other nontraditional formats. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): ART 351, 352, or 354 with a C or better; credit is allowed for only ART 453, 553 or 598 (Experimental Printmaking) |
| ART | 454 | Advanced Screen Printing | Continuation of paper, direct, and photographic stencil techniques. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 354 with C or better |
| ART | 456 | Fine Printing and Bookmaking I | Letterpress printing and typography as fine art. Study of history, alphabets, mechanics of hand typesetting, presswork, and various forms of printed matter. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 253 with C or better, or non-art major with 56 credit hours; minimum 2.50 GPA. Credit is allowed for only ART 456 or ART 556 or ART 598 Fine Printing and Bookmaking I |
| ART | 457 | Fine Printing and Bookmaking II | Continuation of ART 456. Bookbinding, book design and printing, advanced typography, theory, and presswork. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art student; ART 253 and ART 456 with C or better; Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 458 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments, and 3-D approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 253 with C or better, or non-majors with 56 minimum credit hours; minimum 2.50 GPA. Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 458 or ART 558 |
| ART | 459 | Monoprinting | Nonmultiple printed image using a variety of technical approaches. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BA or BFA Art major, minimum 45 hours; or OR BIS Interdisciplinary Studies (Studio Art concentration) or Studio Art minor; ART 110, ART 112 (or ART 113, 115 or 116) with C or better |
| ART | 460 | Ceramic Clay | Research into various clay body formulations, local natural materials, slip glazes, and engobes. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 with C or better; Pre- or corequisite(s): ART 360 and ART 364 with C or better if completed |
| ART | 461 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Minimum 50 hours; credit allowed for only ART 461 or 494 (Polymer Plate Prints) |
| ART | 463 | Ceramic Glaze | Glaze calculation and formulation using various glaze colors and surfaces. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art major; ART 261 with C or better |
| ART | 466 | Special Problems in Ceramics | Emphasis on personal expression within structure of seminars, critiques, and studio work. Professional methods of presentation/documentation of work. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 261 and ART 364 with C or better |
| ART | 472 | Advanced Jewelry and Surface Techniques | Covers jewelry forms and techniques including surface embellishment such as granulation, keum-boo and filigree to be used as tools for aesthetic expression and expand student awareness of historical and contemporary jewelry/metalwork. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 and ART 372 with C or better |
| ART | 473 | Advanced Metals and Mechanisms | Covers new techniques and develops existing skills in non-ferrous metal forming and mechanism fabrication while further refining fitting and finishing techniques, incorporating concept with craft and emphasizing professional practices/portfolio development. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 272 with C or better; ART373 with C or better; credit is allowed for only ART 473 or 598 (Adv. Metals & Mechanisms) |
| ART | 474 | Advanced Wood | Extended experience and advanced techniques in the use of wood to create functional works of art. 6 hours a week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 274 and ART 374 with C or better |
| ART | 476 | Woven Structures II | Emphasizes personal expressions and continues technical exploration in woven structures. May be repeated for credit. 6 hours a week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 376 with C or better |
| ART | 477 | Printed Textiles | Techniques for screen printing on fabric exploring pattern as a compositional element. Various stencil methods including photographic processes. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student; ART 276 and ART 377 with C or better |
| ART | 478 | Advanced Surface Design | Emphasis on personal expression with advanced problems in stitch resist, arashi shibori, transfers, indigo, vat and disperse dyes, and pigments. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Art student with portfolio completed; ART 276, ART 377 and ART 477 with C or better |
| ART | 479 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Art major or Studio Art minor; ART 276 with C or better; Credit is allowed for only ART 479 or ART 579 or ART 598 (3-D Fibers) |

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| ART | 482 | Senior Exhibitions/Portfolio | Capstone course required of all BFA studio art majors. Students participate in a group exhibition and focus on professional practices, including exhibition display and advertisement, career planning, and development of a professional packet with artist statement, CV, and digital portfolio. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): BFA student; minimum 100 hours; credit is allowed for only ART 482 or 494 (Senior Exhibition/Portfolio) |
| ART | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): Art student |
| ART | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | STO | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | | Prerequisite(s): Barrett Honors student |
| ART | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | STO | N | Z1 | Herberger Inst Design & Arts | School of Art | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ART | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | |
| ART | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ART | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-7 | L | |
| ART | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | |
| ART | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-3 | | Prerequisite(s): Art student |
| ART | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): Art student |
| ART | 501 | Cross-Practice Critique | Engages graduate students in deep, sustained critical discussion about artwork made by students in the class. Students investigate together the process(es) of critiquing artwork and consider and discuss the underlying assumptions and values they bring to this method of communication and pedagogy. Helps students develop and improve their critical voice at whatever level they are at, including the ability to receive and accept critical feedback of their work. Encourages students to hone their sense of personal agency in the context of "the crit." | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| ART | 508 | Experimental Film | Facilitates the exploration of 16 mm motion picture film as material and methodological fodder for artists. Students use original, found, and hand-altered footage to create projects of their own design. Covers basic techniques including camera operation, film exposure, and analog editing practices. Explorations also include in-class experiments, readings, discussions and screenings. For upper-division undergraduate and graduate art students attracted to the material and theoretical issues embodied in film and who are curious about how film might inform their own ongoing advanced artistic pursuits. Graduate level focuses on the development of a personal approach. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 408, 494 (experimental Film), or ART 508, or ART 598 (Experimental Film) |
| ART | 514 | Graduate Life Drawing | Advanced study of the human figure as an expressive vehicle in various contexts. Graduate level focused on the development of personal approach. Timed poses of short and long duration with emphasis on using the figure to enhance the students individual research. Art historical component will be included to enable the student to fit themselves into the context of the use of the figure as it relates to the study of the history of art. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 414 or 514 |
| ART | 523 | Graduate Painting | Concentrates on formal and conceptual skills and explores a variety of topics, including historical and contemporary painting issues, visual literacy, critical thinking, and professional practices. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR Senior or Postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 423 or 523 |

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| ART | 525 | Graduate Figure Painting | Advanced study of the human figure clothed and nude as the subject for painting in selected media. Graduate level study focused on the development of personal expression. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 425 or 525 |
| ART | 527 | Graduate Art on Paper | Exploration focused on conceptual and technical approaches combining mixed media painting and drawing on paper and related surfaces. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): Herberger Institute for Design and the Arts graduate student; credit is allowed for only ART 427 or 527 |
| ART | 528 | Video & Sound as Sculptural Materials | Uses video and sound as tools to explore sculptural ideas. The emphasis is not on advanced techniques and technologies for the creation of video and sound, but rather on the creative use of these tools to arrive at an enlivened relationship to the physical world and thus to sculpture. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 428, ART 528, or ART 598 (New Systems Sculpture) |
| ART | 530 | Digital Compositing | Fine arts digital compositing of computer animation, video, and video editing of composites with audio. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student OR senior OR postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 532 | Neon Sculpture | Emphasizes techniques for creating neon in an art context, including glass bending and fabrication. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 532 or ART 598 (Neon Sculpture) |
| ART | 533 | Foundry Casting Methods | Thorough and directed course for the professional preparation of sculptors. Students are expected and required to participate in all aspects of the foundry process, including serving on both a casting and foundry process maintenance team. Students deepen their knowledge of the history of the use of cast metal in the visual arts and understanding of how casting processes can be applied to contemporary sculptural concepts, participating in special projects such as exhibitions, iron casting, and field trips to local foundries as the semester course schedule dictates. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 533 or 598 (Foundry Casting Methods) |
| ART | 538 | Experimental Systems in Sculpture | Students create sculptures that incorporate movement, sound and interactivity while also developing their personal expression as artists. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 438, 538 or 598 (Exp. Systems in Sculpture) |
| ART | 539 | Intermedia Studio | Investigates how intermedia practice can expand the realm of conversations within contemporary art, life and society. Encourages investigation of social art practice, art/life practices, conceptual art, digital art, emergent media, installation, new genre public art, performance, and visual art with emphasis on research, production and theory. Students expand their ability to assess interdisciplinary strategies. Through reinforcing artistic rigor, students deepen their ability to employ intermedia methods as artistic communication, to express a personalized point of view. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 439, 539 or 598 (Intermedia Studio) |
| ART | 542 | Art and Community | Through studio practice, research and presentations, explores intermedia social art practice, public practice, art/life practice, relational aesthetics, community-based projects, and other critical theories and conventions that engage art and community. Graduate students, in conjunction with the instructor, create their own workplan for the course. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 542 or 598 (Art and Community) |
| ART | 543 | Intermedia Performance | This concept-driven course explores intermedia as a contemporary art practice from a performance/live art perspective. Students create performance and time-based work connected to their individual artistic interests while making connections among art, life, and society. Students working in a diverse range of disciplines and artistic genres discover new processes of working and negotiate unexpected connections inherent in interdisciplinary production and cross-disciplinary collaboration. Student projects depend on particular specializations and passions brought to the class and may produce a range of multimedia performance work including performing for the camera, interactive networks, analogue/digital sound, video, sculpture, and installation. Semester I addresses the body as material exploring the body, subjectivity, and cultural histories. Semester II focuses on the body in public space exploring intervention and the everyday. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 543 or 598 (Intermedia Performance) |
| ART | 544 | Graduate-Level Web Art | Students research Web art and apply this to their own art practice. Concepts and content of the Web art class projects parallel individual aesthetic preferences. Explores Web technology as a new medium to create interactive Internet works. Technical emphasis on interactivity and time-based net art. Utilizes existing software, learning the interface and programming associated with it. Includes articles and essays by professional Web artists and theorists in required reading. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 494 (Web Art), ART 544, or ART 598 (Web Art) |

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| ART | 545 | Digital Processes for Printmaking | Introduces digital applications and processes as they relate to all areas of photo-mechanical printmaking processes. Course is comprised of three smaller sections to give a broad overview of possibilities and how they relate to analog printmaking techniques: image capture, film generation and analog processes, and digital and inkjet printing. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 545 or 598 (Digital Processes for Printmaking) |
| ART | 551 | Advanced Intaglio | Gives students the opportunity to further develop their skills with intaglio printmaking techniques. Primary areas of research include image development, multiple plate and color printing. Additional techniques include lift grounds, spit bite aquatint, white ground, and viscosity printing. Develops sharper critical responses, both aesthetically and conceptually, to their own work, as well as the work of other artists. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or post-baccalaureate undergraduate with minimum of 108 earned hours; credit is allowed for only ART 451 or 551 |
| ART | 553 | Experimental Printmaking: Beyond the Matrix | Focuses on the development of concepts in printmaking beyond the traditional two-dimensional image on paper that is contained in a portfolio or frame. Explores alternative techniques and materials, methods of extending the print beyond 2 dimensions, and expanding the concept of what is a print. Students are encouraged to understand printmaking within the wider context of contemporary art, especially those directly related to the student's main artistic emphasis (if not printmaking). | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 553, 453 |
| ART | 554 | Graduate Screenprinting | Focuses on the development of screenprinting techniques and the ability to utilize these techniques as an expressive visual method of exploring and developing individual research concepts. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 554 or 598 (Advanced Screen Printing) |
| ART | 556 | Fine Printing and Bookmaking I | Offers instruction in the techniques of fine printing--letterpress--and using typography and printing as a fine art medium, as well as evaluating text as image and content in the aesthetics of print. Also considers bookforms, binding techniques and artists' books for the expansion of that aesthetic. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ART 456, ART 556, or ART 598 (Fine Printing and Bookmaking I) |
| ART | 557 | Fine Printing and Bookmaking II | Continuing study of letterpress in fine art--the book arts--with emphasis on the book. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only ART 457, 557 or 598 (Fine Printing and Bookmaking II) |
| ART | 558 | Papermaking | History, theory, demonstrations, sheet forming, collage treatments and 3-D approaches. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 458, ART 558 or ART 598 (Papermaking) |
| ART | 559 | Monoprinting | Investigates monoprint/monotype printmaking and its aesthetic possibilities. Students acquire basic and advanced skills in the medium through demonstrations, problem solving exercises, and experimentation. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 559 or 598 (Monoprinting) |
| ART | 561 | Polymer Plate Prints | Explores the creative process of polymer plate printmaking as a fine art medium. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum 108 hours; credit is allowed for only ART 561 or 598 (Polymer Plate Prints) |
| ART | 576 | Woven Structures | Expanding upon prior woven techniques, develops methods in warp manipulation through material explorations, dye techniques and structure applications. Dye methods include ikat, warp painting and over-dyeing. Complex structural investigations include loom controlled double weave, over-shot, computer-aided design, and the compu-dobby loom. In addition to learning technical skills, also provides theoretical and historical readings with in-class discussions that provide impetus for conceptual developments within the assignments. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only ART 476, 576, or ART 598 (Woven Structures) |
| ART | 577 | Printed Textiles | Provides advanced instruction in surface design techniques, focusing on screen printing on fabric. Explores a variety of stencil methods. Studio problems explore structured pattern and single edition prints. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 577 or 598 (Printed Textiles) |
| ART | 578 | Advanced Surface Design | Explores advanced surface design methods and the expressive potential of fabric. Critical analysis of the integration of materials, process, and concept. Emphasizes conceptual development with technical proficiency. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; credit is allowed for only ART 578 or 598 (Advanced Surface Design) |
| ART | 579 | 3-D Fibers: Construction and Content | Explores hand-constructed fiber techniques through the context of the history and communities from which they came, as well as contemporary applications. Emphasizes research and the development of one's work through studio and social practice. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ART 479, 579 or 598 (3D Fibers) |
| ART | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ART | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GNA | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ART | 621 | Studio Problems | Advanced study. 3 hours a week each section. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Art | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z2 | Herberger Inst Design & Arts | School of Art | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ART | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Art | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student or senior or postbaccalaureate undergraduate with minimum of 108 earned hours |
| ASB | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease; ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB 100 or SSH 100 |
| ASB | 101 | Anthropology: Understanding Human Diversity | Provides an integrated understanding of biological, historical, and cultural evolutionary processes that account for human variation. Specifically examines how humans evolved and how they obtained the characteristics that make us a unique species. Considers cultural and biological models of cooperation, resource acquisition and distribution, sex and marriage, parenting, conflict and warfare, political structures, power and status, sex roles, ritual, religion, and language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 102 | Culture in a Globalizing World | Introduces concepts and methods of sociocultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of social, political and economic dimensions of how humans organize their lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| ASB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |
| ASB | 202 | Immigration and Ethnic Relations in the U.S. | The ethnic and social consequences of international migration with a focus on the United States. Examines the impact of immigration on both American society and immigrant ethnic minorities over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only AFR 202 (or AFS 202) or ASB 202 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASB | 210 | Human Sexuality: Anthropological Perspectives | Examines the sexual nature and behavior of humans from both a biological and an anthropological point of view across various cultures around the globe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | |
| ASB | 211 | Women in Other Cultures | Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | |
| ASB | 220 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| ASB | 222 | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| ASB | 222 | Buried Cities and Lost Tribes | Archaeology through its most important discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 223 | Aztecs, Incas and Mayas | Archaeological and historical study of the three best-known ancient cultures of Mesoamerica and South America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | |
| ASB | 230 | Beginning Social Research | Introduces basics of social research design; fosters independent thinking and critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| ASB | 252 | Sports and Culture | Cross-cultural examination of symbolic and social dimensions of sports past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | |
| ASB | 272 | Environmental Justice | Surveys key environmental justice issues and movements. Uses interdisciplinary social science perspectives to review and analyze U.S. and international | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Credit is allowed for only ASB 272 or SOS 272 |
| ASB | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| ASB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisites: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| ASB | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better. Credit is allowed for only ASB 301, HST 301 or SSH 301 |
| ASB | 302 | Ethnographic Field Study | Fieldwork study of cultural adaptation through ethnographic research methods and local culture. Taught in Latin America or other international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisite: ASB 102, 222, 223, or ASM 104 |
| ASB | 310 | Precolonial Africa | In-depth course study of contemporary Africa, providing thorough examination of the continent's pre-colonial history, particularly before 1900. The course will study the continent and its people, the way the history of the continent has been interpreted by non-Africans, how the continent's anatomy has affected historical development, and the methodology and interdisciplinary scholarship in the study of Africa | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 300 (or AFH 300) or ASB 310 |

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| ASB | 311 | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | |
| ASB | 311 | Principles of Social Anthropology | Comparative analysis of domestic groups and economic and political organizations in primitive and peasant societies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| ASB | 314 | Comparative Religion | In-depth study of origins, elements, forms, and symbolism of religion; an advanced comparative survey of religious beliefs and ceremonies; the place of religion in culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 316 | Money and Culture | Using the fundamentals of economic anthropology, investigates how culture shapes our relationship to money and decision making. Provides a foundation for thinking about how production, exchange and consumption can be explained by looking at human behavior, thought and culture, and encourages students to apply anthropological knowledge to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| ASB | 319 | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 319 | The North American Indian | Archaeology, ethnology, and linguistic relationship of the Indians of North America. Does not include Middle America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: ASB 102, ASB 222, or ASB 223 |
| ASB | 321 | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | 321 | Indians of the Southwest | The advanced study of cultures among the contemporary Indians of the southwestern United States and their historic antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & H & C | Pre-requisites: ENG 101 and ASB 102 or ASB 222 or ASB 223 |
| ASB | 322 | Peoples of Latin America | Indigenous, mestizo, and national cultures, rural and urban peoples in the region that today we call Latin America. Covers historic and contemporary events and cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Pre-requisites: ASB 102 with C or better or minimum 45 hours |
| ASB | 324 | Peoples of the Pacific | Peoples and cultures of Oceania focusing particularly on societies of Melanesia, Micronesia, and Polynesia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 325 | Peoples of Southeast Asia | Cultural-ecological perspective on the peoples of mainland and insular Southeast Asia. Subsistence modes, social organization, and the impact of modernization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | G | |
| ASB | 326 | Human Impacts on Ancient Environments | World survey of successful and unsuccessful ancient societies and their impacts on the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | |
| ASB | 327 | Disaster! | Examines the causes of disasters, such as famines and pandemics, throughout human history. Explores cases in which social responses to disaster have helped people survive or led to their demise. Through hands-on activities, students gain experience with popular tools to understand human responses to disasters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Prerequisite(s): ASB 102 with C or better or minimum 45 hours |
| ASB | 328 | Rules, Games, and Society | Concepts and practical tools to study the relation between groups of people and their common resources and public goods. Methods for identifying the diversity of institutional arrangements and analyzing their effectiveness. Example topics include sports, digital commons, environmental management, and urban environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101; Minimum 45 hours |
| ASB | 330 | Understanding Archaeology | In-depth study and critique of theories and methods for reconstructing the lives of prehistoric peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 45 hours |
| ASB | 335 | Ancient Ruins of the Southwest | Archaeological exploration of the the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Prerequisite(s): ASB 102 or 222 or 223 or minimum 45 hours |
| ASB | 335 | Ancient Ruins of the Southwest | Archaeological exploration of the the major cultural developments in the prehispanic Southwest, including Mesa Verde, Chaco Canyon, Mimbres, Hohokam and Rio Grande. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H & C | Prerequisite(s): ASB 102 or 222 or 223 or minimum 45 hours |
| ASB | 336 | African Art | Anthropological perspective of ancient visual art traditions of Africa. In-depth studies focus on several important themes and case studies that are pivotal to the understanding of the rich and diverse artistic heritage of the African continent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or ASB 102 or minimum 45 hours; Credit is allowed for only AFR 336 (or AFH 336) or ASB 336 |
| ASB | 337 | Pyramids and Hieroglyphs: Life in Ancient Mesoamerica | Preconquest cultures and civilizations of Mexico. The Aztecs, Mayas, and their predecessors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (HU or SB) & G & H | Prerequisite(s): minimum 45 hours |
| ASB | 338 | Archaeology of North America | In-depth study of the origin, spread, and development of the prehistoric Indians of North America up to historic tribes. Does not include the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisites: ASB 102 or ASB 222 or ASB 223 |
| ASB | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASB | 340 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |
| ASB | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| ASB | 344 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB 344 or SOC 334 |
| ASB | 346 | Marriage and Family Diversity | Social, economic, and cultural factors that shape family diversity in relation to generational and gender dynamics within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| ASB | 350 | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU | |
| ASB | 350 | Anthropology and Art | Art forms of people in relationship to their social and cultural setting. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only SOC 353 or ASB 353 |
| ASB | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Pre-requisites: ASB 102, ASB 222, ASB 223 or ASM 104 or SSH 100 or ASB 100 with C or better. Credit is allowed for only SSH 355 or ASB 355 |
| ASB | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| ASB | 361 | Pleistocene Archaeology | Biosocial evolution in the Pleistocene, emphasizing technological achievements and the relationship between technology and environment in western Europe, sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | H | |
| ASB | 362 | People and Plants | Offers a global survey of ethnobotany, the study of the uses of plants by people. Integrating botany, anthropology and archaeology, students learn about the roles plants have played as foods, tools, medicines and foci of religious devotion and ritual experience across human history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 45 hours |
| ASB | 366 | African Archaeology: Precolonial Urban Culture | In-depth analysis of African civilization from the last 10,000 years up to 1850 via archaeological, documentary, and oral data. Special study will be placed on the evidence relating to dynamics of civilizations in ancient Africa, their foundation, growth, and failure, which spans a period of two million years | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 366 (or AFS 366) or ASB 366 |
| ASB | 368 | Hunter-Gatherers | Studies of known hunting and gathering societies with the goal of developing approaches to understanding past and/or present hunting and gathering societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 45 hours |
| ASB | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB 370, SOC 370, SOS 370, or SSH 370 |
| ASB | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisites: ENG 101,105 or 107 with C or better; Minimum of 45 hours completed; Credit is allowed for ASB 371, ASB 394 (Inequality and Sustainability), SOS 371 or SOS 394 (Inequality and Sustainability) |
| ASB | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit for only ASB 374, POS 374, SBS 374 or SOC 374 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASB | 375 | Humans and the Environment: What's the Connection? | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and "use" their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): minimum 45 hours; Credit is allowed for only ASB 375 or SOS 375 or ASB 394 (People: Environment Connections in Anthropology) or ASB 494 (Ecological and Environmental Anthropology) |
| ASB | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| ASB | 380 | Language, Culture and Gender | Focuses on how language, thought and culture are intertwined in everyday practice. Students learn the central role of language in shaping and reflecting social norms and social actions cross-culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): minimum 42 hours |
| ASB | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| ASB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | 395 | Topics in Comparative Culture | In-depth study of specific topic(s) cross-culturally. Students engage with the subject matter through critical evaluation of literature, hands-on analysis and interpretation of data, and scientific writing. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 42 hours |
| ASB | 402 | Visual Anthropology | Explores visual anthropology as a method for social documentation, and as a way to interpret cultural ways of seeing. Brings together anthropology, fine art, and art history students to exchange ideas about how we create, interpret, and communicate visual meanings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| ASB | 412 | History of Anthropology | Historical treatment of the development of the culture concept and its expression in the chief theoretical trends in anthropology between 1860 and 1950. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | |
| ASB | 417 | Political Anthropology | Comparative examination of the forms and processes of political organization and activity in primitive, peasant, and complex societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 430 | Social Simulation | Students will apply computer simulation and agent-based modeling techniques to study social systems relating to concrete research questions. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | CS | Prerequisite(s): AML 100 or MAT 142, 170, 210, 265, or 270 with C or better OR Mathematics Placement Test score of 50% or higher; minimum 56 hours; Credit is allowed for only ASB 430 or CPI 430 or AML 330 |
| ASB | 442 | Urban Studies | Studies local and global urban issues such as social geography, political economy, culture and social space, urban social diversity. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 442 or SBS 460 |
| ASB | 443 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisite: SSH 100 or ASB 100. Credit is allowed for only ASB 443 or SSH 403 |
| ASB | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| ASB | 452 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only SSH 402 or ASB 452 |
| ASB | 455 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| ASB | 462 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |

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| ASB | 463 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Prerequisite(s): minimum 45 hours; Credit is allowed for only ASB 463 or SOS 463 or TCL 443 |
| ASB | 464 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| ASB | 466 | Peoples and Cultures of Africa | Surveys African peoples and their cultures, external contact, and changes. Meets non-Western requirement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 466 (or AFS 466) or ASB 466 |
| ASB | 471 | Introduction to Museums | History, philosophy, and current status of museums. Explores collecting, preservation, exhibition, education, and research activities in different types of museums. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | |
| ASB | 480 | Principles of Linguistics | Descriptive and historical linguistics. Surveys theories of human language, emphasizing synchronic linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 483 | Sociolinguistics and the Ethnography of Communication | Relationships between linguistic and social categories; functional analysis of language use, maintenance, and diversity; interaction between verbal and nonverbal communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| ASB | 485 | U.S.-Mexico Border in Comparative Perspective | Explores the multicultural and social dimensions of communities along the U.S.-Mexico border, emphasizing social organization, migration, culture, and frontier ideology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASB | 490 | Earliest Cities | Archaeological research on the origins and development of the earliest urban centers around the world. Applies urban theory and comparative analysis. Compares ancient and modern cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & H | Pre-requisites: ASB 222 or ASB 223 with C or better; Minimum 45 hours; Credit is allowed for only ASB 490 or PUP 490 |
| ASB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| ASB | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| ASB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| ASB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. ASB 503/SSH 503. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields. Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | 511 | Ethics in Health Social Science Research | Ethics and social justice issues in community-based health research relevant to health social science, including informed consent, community involvement, control, advocacy. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 513 | Research Design and Proposal Writing in Health Social Science | Research design, piloting, and proposal writing for social scientists conducting health research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| ASB | 525 | Introduction to Material Culture | Considers how objects embody social relationships and therefore cultural meanings. Seminar explores theories that give insight into social processes such as exchange, consumption, and identity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 529 | Culture and Political Economy | Origin and spread of Western capitalism and its impact on non-Western societies. Utilizes ethnographic and historical case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 530 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 530 or SOS 553 |
| ASB | 532 | Graduate Field Anthropology | Independent research on a specific anthropological problem to be selected by the student in consultation with the staff. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 2-8 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 537 | Topics in Mesoamerican Archaeology | Explores changing organization of pre-Columbian civilizations in Mesoamerica through interpretive issues, such as regional analysis, chiefdoms, urbanism, and exchange. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 540 | Scholarly Inquiry in Anthropology | Basic issues and concepts in anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student within one of the following programs in the School of Human Evolution and Social Change: Anthropology, Museum Anthropology, Social Science and Health, and Environmental Social Sciences |
| ASB | 541 | Theory in Sociocultural Anthropology | Basic issues and concepts in sociocultural anthropology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 542 | Archaeology of Small-Scale Societies | Approaches to small-scale (i.e., hunter-gatherer and tribal) societies, archaeological method and theory, ethnography, models of human and cultural evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 544 | Settlement Patterns | Spatial arrangement of residences, activity sites, and communities over landscape. Emphasizes natural and cultural factors influencing settlement patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 547 | Origins of Agriculture | Archaeological evidence for transitions in Old World subsistence economies from hunting and gathering to dependence on domesticated plants and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 549 | Chiefdoms | Examines archaeological evidence of chiefdoms, distinguished by hereditary leadership and non-bureaucratized decision-making elite, to illustrate emergence of social complexity, inequality. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 558 | Mortuary Practices and Cultural Analysis | Critical overview of theory and methods of reconstructing lifeways of past peoples with ethnographic/archaeological data and a bioarchaeological perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 560 | Theory and Archaeology | Applies social theory to archaeological study of societies of the past. Includes practice theory, hierarchy, space and place, material culture. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 563 | Hunter-Gatherer Adaptations | Evolution of prehistoric hunter-gatherer societies in the Old and New Worlds from the most ancient times through protohistoric chiefdoms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 567 | Southwestern Archaeology | Broad coverage of Southwestern cultural developments focusing on current debates and rigorous use of archaeological data in making cultural inferences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 568 | Intrasite Research Strategies | Research issues within a single site context. Topics include quantitative spatial analysis, site definition, sampling, distributional analysis, and substantive interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|-------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|-------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------|
| ASB | 572 | Museum Collection Management | Principles and practices of acquisition, documentation, care, and use of museum collections; registration, cataloging, and preservation methods; legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only ASB 573 or HST 573 |
| ASB | 574 | Exhibit Design and Development | Exhibition philosophies and development; processes of planning, designing, staging, installing, evaluating, and disassembling temporary and long-term exhibits. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 579 | Critical Issues in Museum Studies | Current debates of museum practice from an anthropological perspective. Addresses issues of collection, presentation, authenticity, and authority. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ASB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| ASC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASC | 315 | Numeracy in Technology | Contextual uses of mathematics in applied sciences. Emphasizes using mathematical methodologies to solve technology-related problems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): BAS major |
| ASC | 325 | Physical Sciences in Technology | Physical systems and their interrelationships on technology systems. Real-world applications of physical systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Pre-requisites: BAS major |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: Polytechnic BAS student |
| ASC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| ASC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Pre-requisites: Polytechnic BAS student |
| ASC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisites: Polytechnic BAS student |
| ASE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | Pre-requisites: Must be a non degree undergraduate student with less than or equal to 25 total earned hours |
| ASE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| ASE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| ASE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| ASE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |
| ASE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 104 | Bones, Stones, and Human Evolution | Physical anthropology and archaeology. Evidence and processes of human evolution and of culture change. Primates. Fossil hominids and their tools. Race, variation, and heredity. Environment and human biology. Prehistoric culture and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SB or SG | |
| ASM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASM | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201 or SSH 201 |
| ASM | 246 | Human Origins | History of discoveries and changing interpretations of human evolution. Earliest ancestors to emergence of modern humans. Humanity's place in nature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 275 | Forensic Anthropology | Discusses the role of the forensic anthropologist in medico-legal investigations involving skeletonized human remains. Includes forensic recovery techniques, identification of decedents through skeletal and dental analysis, and reconstructing the crime scene through analysis of trauma patterns. Covers the legal aspects of forensic practice and considers historical case studies and the contributions forensic anthropologists make to mass disaster investigations and human rights abuses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SB or SG | |
| ASM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 300 | Anthropological Sciences Seminar | Focuses on the ways in which research findings are produced by diverse theories and methods in the anthropological sciences, usually in combination with other life and physical sciences, with a strong focus on combination anthropological conceptual frameworks with quantitative methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: BS in Anthropology major; Two of the following: ASB 102, 222 (or 223), AML 100, ASM 104 with a C or better |
| ASM | 301 | Peopling of the World | Reviews all evidence for human dispersal during the last 100,000 years, origins of language, cultures, races, and beginnings of modern humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Pre-requisite: ASM 104 |
| ASM | 332 | Life and Death in Ancient Egypt | Reveals ancient Egyptian life through recent research in archaeology and physical anthropology on cemeteries, tombs, and the dead themselves. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only AFR 332 (or AFS 332) or ASM 332 |
| ASM | 338 | Anthropological Field Session | Anthropological field techniques, analysis of data, and preparation of field reports. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASM | 341 | Human Osteology | Osteology, human paleontology, and osteometry. Description and analysis of archaeological and contemporary human populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: ASM 104 with C or better; 25 minimum hours |
| ASM | 342 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| ASM | 344 | Fossil Hominids | The fossil evidence for human evolution, emphasizing the concepts and methods for reconstructing the past. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisite: ASM 104 |
| ASM | 345 | Disease and Human Evolution | Interaction of people and pathogens from prehistoric times to the present, with emphasis on disease as an agent of genetic selection. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): ASM 104 or BIO 100 or BIO 181 (or BIO 188) or BIO 182 (or BIO 187) or BIO 281 or BIO 282 |
| ASM | 348 | Social Issues in Human Genetics | Moral and social implications of developments in genetic science, particularly as they affect reproduction, medicine, and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | |
| ASM | 350 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 (or 223), or GLG 101 (or 103), or GPH 111, with C or better |
| ASM | 365 | Doing Archaeology | Using hands-on analysis of artifacts and a mock site, this advanced introduction to archaeology acquaints the student with the field and laboratory methods applied by archaeologists, the information archaeologists use, and how they construct knowledge of the past. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Prerequisite(s): ASB 222 (or ASB 223 or 335 or 337) |
| ASM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |

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| ASM | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| ASM | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only SOS 424, BIO 424, or ASM 424 |
| ASM | 435 | Archaeological Pollen Analysis | Theory, methodology, and practice of pollen analytic techniques. Compares uses in botany, geology, and archaeology. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASM | 443 | Primateology | Evolution and adaptations of nonhuman primates, emphasizing social behavior. Includes material from fossil evidence and field and lab studies in behavior and biology which must be critically integrated with relevant competing theories concerning the evolution of primate behavior and biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; Minimum 56 hours. Credit is allowed for only ASM 443 or 543 |
| ASM | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Prerequisite(s): ASM 301 or BIO 340 or LSC 347 or MBB 347 with C or better; Credit is allowed for only ASM 446 or ASM 546 or BIO 446 or BIO 546 |
| ASM | 450 | Bioarchaeology | Surveys archaeological and physical anthropological methods and theories for evaluating skeletal and burial remains to reconstruct biocultural adaptation and lifeways. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 104 |
| ASM | 452 | Dental Anthropology | Human and primate dental morphology, growth, evolution, and genetics. Within- and between-group variation. Dental pathology and behavioral-cultural-dietary factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | SG | Pre-requisites: ASM 104. Credit is allowed for only ASM 552 or ASM 452 |
| ASM | 453 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASB 222 or 223 with C or better; ASM 104 with C or better; Minimum 56 hours; Credit is allowed for only ASM 453 or 553 |
| ASM | 454 | Comparative Primate Anatomy | Functional anatomy of the cranial, dental, and locomotor apparatus of primates, including humans, emphasizing the relation of morphology to behavior and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| ASM | 455 | Primate Behavior Laboratory | Instruction and practice in methods of observation and analysis of primate behavior. Discusses the relationship between class work on captive animals and field techniques for studying free-ranging groups. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L | Pre-requisite: ASM 343 |
| ASM | 456 | Infectious Disease and Human Evolution | Study of infectious disease and humanity, using evidence from anthropology, history, medicine, and ancient skeletons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 345 |
| ASM | 459 | Forensic Anthropology | Applies anthropology, primarily human osteology, to legal questions, including individual identification, crime scenes, forensic reports, police work, and court testimony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: ASM 341; ASM 275; Credit is allowed for only ASM 459 or 559 |
| ASM | 460 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life; evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: ASM 104 with C or better; ASM 341, ASM 342, ASM 344, ASM 345 or ASM 348 |
| ASM | 465 | Quantification and Analysis for Anthropologists | Statistical and quantitative strategies for envisioning and exploring archaeological, physical anthropological, bioarchaeological, and socialcultural data. Univariate and bivariate methods. A basic understanding of algebra is necessary to be successful in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | CS | |
| ASM | 472 | Archaeological Ceramics | Analysis and identification of pottery wares, types, and varieties. Systems for ceramic classification and cultural interpretation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | |
| ASM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| ASM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ASM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| ASM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| ASM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |

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| ASM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| ASM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 506, ASM 506 or MCB 506 |
| ASM | 520 | Agent-Based Modeling | Introduces agent-based modeling to simulate social and social-ecological systems. Topics include design, analysis, and empirical grounding of agent-based models to a variety of application domains including collective action, diffusion processes, resource use, health, and complex societies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 525 | Primate Paleobiology | Seminar-based survey of primate evolution, focusing on comparative biology of the extant primates and the fossil record through the Miocene. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 530 | Paleoanthropology | Seminar-based in-depth study of the fossil record of human evolution and its geological, environmental, and phylogenetic contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 543 | Primateology | Advanced study of nonhuman primate behavioral adaptations, emphasizing comparative sociality, incorporating data on behavior and biology from field and captivity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit allowed for ASM 443 or 543 |
| ASM | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); credit is allowed for only BIO 446, ASM 446, BIO 546 or ASM 546 |
| ASM | 548 | Geoarchaeology | Geologic context relevant to archaeological research. Topics include sediments, deposition environments, soils, anthropogenic and biogenic deposits, and quaternary chronology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 552 | Dental Anthropology | Evolutionary anthropology of non-human primate and human dentition and research from extant and extinct species of non-human primates and hominins. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 452 or ASM 552 |
| ASM | 553 | Human Behavior through Bone Chemistry | Focuses on the many ways that biogeochemical analyses of archaeological bone and teeth can inform our understanding of past human behavior. Topics include migration and residential mobility, paleodiet, post-depositional contamination and dating methods. Students will learn through lectures, discussions, student presentations, and hands-on laboratory projects. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 453 or 553 |
| ASM | 555 | Advanced Human Osteology | Intensive lab course covers identification of human skeletal remains and bone fragments from archaeological contexts. Emphasizes skeletal biology, variation, anatomical landmarks, determinants of age, sex, and stature. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisite: ASM 341 or Anthropology graduate student |
| ASM | 560 | Human Growth and Development: An Evolutionary Perspective | How growth and development influences human variation; stages of human life, evolution through the fossil record; genetic, environmental, and biocultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 565 | Quantitative Archaeology | Formal methods of structuring, codifying, and analyzing data for archaeological problems. Designing research to yield data amenable to productive analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 568 | GIS and Spatial Technologies in Anthropological Research | In-depth survey of spatial technologies in anthropological research, including GIS, spatial modeling, remote sensing, and image analysis and classification. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Graduate student (degree or non-degree); Credit is allowed for only ASM, BIO, or SOS 570 |
| ASM | 573 | Lithic Analysis | Analysis and interpretation of chipped stone artifacts. Focus on both techniques and underlying concepts and their application to real collections. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 611 | Paleopathology | Explores patterns of disease manifested in the human skeleton and differential diagnosis of infectious, metabolic, neoplastic, congenital, and other conditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); ASM 555 |
| ASM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 111 | Introduction to Solar Systems Astronomy | History, properties of night, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 111 | Introduction to Solar Systems Astronomy | History, properties of night, instruments, study of solar system and nearby stars. For nonscience majors. Optional lab (AST 113). Both AST 111 and AST 113 or AST 114 must be taken to secure SQ general studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| AST | 112 | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| AST | 112 | Introduction to Stars, Galaxies, and Cosmology | Structure and evolution of stars, star clusters, galaxies, cosmology. For nonscience majors. Optional lab (AST 114). Both AST 112 and AST 113 or AST 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| AST | 113 | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | 113 | Astronomy Laboratory I | Astronomical observations and experiments designed to help the student become familiar with the sky, telescopes, and astronomical measurements. Both AST 111 and 113 or AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111 or AST 321 |
| AST | 114 | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | 114 | Astronomy Laboratory II | Similar to AST 113, but material chosen to supplement AST 112 and 322. Both AST 112 and 114 or AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: AST 111, 112, 321 or 322 |
| AST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisite: Maximum 25 hours |

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| AST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 321 | Introduction to Planetary and Stellar Astrophysics | Physical laws; celestial mechanics; properties of planets, the sun, and other stars; formation and evolution of stars and planetary systems. Both AST 113 and 321 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 or 271 with C or better; PHY 121 and 122 (or PHY 150) with C or better |
| AST | 322 | Introduction to Galactic and Extragalactic Astrophysics | Evolved stars, introduction to relativity, galaxies and interstellar matter, structure and dynamics of galaxies, cosmology. Both AST 114 and 322 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Pre-requisites: MAT 266 (or MAT 271), PHY 150 (or PHY 121/122) with C or better |
| AST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| AST | 421 | Astrophysics I | Selected astrophysical topics, including stellar evolution, star formation, interstellar medium, galactic structure, extragalactic astronomy, high-energy astrophysics, and cosmology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 422 | Astrophysics II | Same range of astrophysical topics as for AST 421 but emphasizes different specific topics in a given year. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: AST 321 or AST 322 with C or better; PHY 252 with C or better |
| AST | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| AST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| AST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| AST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| AST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| AST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| AST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| AST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| AST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| AST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 521 | Stars and Interstellar Medium I | Radiative transfer, atomic and molecular properties, stellar atmospheres, line profiles, nonlocal thermodynamic equilibrium, interstellar gas and dust, star formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 522 | Stars and Interstellar Medium II | Stellar structure, radiative transport, boundary conditions, equations of state, nuclear reactions, opacity, nucleosynthesis, chemical evolution of the galaxy, stellar evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 523 | Stars and Interstellar Medium III | Structure of the interstellar medium, gaseous nebulae, recombination theory, ionization fronts and shock waves, galactic magnetic fields, magnetohydrodynamics, molecular clouds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| AST | 531 | Galaxies and Cosmology I | Structure and evolution of the Milky Way, stellar properties, populations and associations/clusters, interstellar medium, dark matter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 532 | Galaxies and Cosmology II | Structure of galaxies and the nearby universe, Hubble sequence, kappa-space, stellar populations, active galaxies, galaxy environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 533 | Galaxies and Cosmology III | Issues in modern cosmology, the distance scale, cosmological parameters, cosmological tests, cosmic background radiation, early universe, galaxy formation and evolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| AST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| AST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ASU | 10 | Connect: ASU Orientation | Students enrolled in the Starbucks College Achievement Plan will learn about ASU's mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Online & Extended Campus | 0 | | |
| ASU | 11 | ASU Online Orientation | Students enrolled in ASU Online Orientation will learn about ASU and its mission as the New American University, discover the value of a university degree from a research institution, discuss academic integrity, explore the tools used in online courses, and identify key components of a work/life/school balance plan. | N | LEC | N | NOG | Office of the Provost | Online & Extended Campus | 0 | | |
| ASU | 19 | Jump Start | One-week program for incoming first-year students to ASU and is designed to set them up for academic success. Introduces the tools and processes that support their journey. Students learn how to connect with other students via collaborative environments. | N | LEC | N | YGB | University College | University Academic Success Programs | 0 | | Prerequisite(s): Jump Start or SPIRIT student |
| ASU | 150 | The LEAD Project I | Students develop in academic areas while also gaining essential career skills in creativity, problem solving, and teamwork. Students learn how to think critically and manage a project from inception to completion. Through course discussions and assignments, students examine connections between their work in other courses and ASU 150. This is the first part of a two-part curriculum which continues into the spring semester. Separate grades will be issued for each semester. | N | LEC | N | GNA | University College | University Academic Success Programs | 1 | | Credit is allowed for only ASU 150 or ASU 194 (The LEAD Project I) or UNI 120 |
| ASU | 151 | The LEAD Project II | Students continue to develop in academic areas while gaining essential career skills in creativity, problem solving and teamwork. Students learn how to think critically and manage a project from inception to completion. Through course discussions and assignments, students examine connections between their work in other courses and this course. Second part of a two-part curriculum, which continues from the fall semester. Separate grades are issued for each semester. | N | LEC | N | GNA | University College | University Academic Success Programs | 1 | | Credit is allowed for only ASU 151 or ASU 194 (The LEAD Project II) |
| ASU | 101-AEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Aerospace Engineering undergraduate student |
| ASU | 101-BME | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering student |

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| ASU | 101-CEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-CHE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Chemical Engineering major |
| ASU | 101-CHS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): College of Health Solutions major |
| ASU | 101-CLS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): College of Letters and Sciences undergraduate student |
| ASU | 101-CNE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | |
| ASU | 101-CON | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-CPP | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1 | | Prerequisite(s): College of Public Service and Community Solutions |
| ASU | 101-CS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): Cronkite School of Journalism and Mass Communication student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 101-CSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 101-CTI | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Ira A. Fulton Schools of Engineering -- Polytechnic School student |
| ASU | 101-EEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): undergraduate Electrical Engineering student |
| ASU | 101-FSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-HDA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): Herberger Institute of Design and the Arts student |
| ASU | 101-HNR | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1 | | Prerequisite(s): Barrett Honors student |
| ASU | 101-IEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1 | | Prerequisite(s): School of Computing, Informatics, and Decision Systems Engineering major |
| ASU | 101-LA | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): College of Liberal Arts & Sciences student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 101-MAE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering students or Aerospace Engineering undergraduate student |
| ASU | 101-MEE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical Engineering undergraduate student |
| ASU | 101-MSE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Schools of Engineering student |
| ASU | 101-NCIAS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): New College of Interdisciplinary Arts and Sciences undergraduate student |
| ASU | 101-NH | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| ASU | 101-NU | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Healthcare Innovation or Nutrition student |
| ASU | 101-SOS | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability student |
| ASU | 101-TE | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Teacher Education and Leadership student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 101-UC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Prerequisite(s): ASU Online students |
| ASU | 101-UC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | University College | Dean, University College | 1 | | Prerequisite(s): College of Letters and Sciences OR University College student |
| ASU | 101-WPC | The ASU Experience | Students will learn about ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students will examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): W.P. Carey student |
| ASU | 140-CHS | ProMod | Project-based learning. | Y | PRO | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 140-CLS | ProMod | Project-based learning. | Y | PRO | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 140-CPSCS | ProMod | Project-based learning. | Y | PRO | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 140-CS | ProMod | Project-based learning. | Y | PRO | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 140-FSE | ProMod | Project-based learning. | Y | PRO | Y | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 140-HDA | ProMod | Project-based learning. | Y | PRO | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 140-HNR | ProMod | Project-based learning. | Y | PRO | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 140-LA | ProMod | Project-based learning. | Y | PRO | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 140-NCIAS | ProMod | Project-based learning. | Y | PRO | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 140-NU | ProMod | Project-based learning. | Y | PRO | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 140-SOS | ProMod | Project-based learning. | Y | PRO | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 140-TB | ProMod | Project-based learning. | Y | PRO | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 140-TE | ProMod | Project-based learning. | Y | PRO | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 140-WPC | ProMod | Project-based learning. | Y | PRO | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 194-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | 194-LA | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ASU | 194-NCIAS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ASU | 194-UC | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | University College | Dean, University College | 1-4 | | |
| ASU | 240-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 240-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 240-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 240-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 240-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 240-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 240-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 240-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 240-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 240-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 240-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 240-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 240-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 240-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 340-CHS | ProMod | Project-based learning. | Y | PRO | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 340-CLS | ProMod | Project-based learning. | Y | PRO | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 340-CPSCS | ProMod | Project-based learning. | Y | PRO | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 340-CS | ProMod | Project-based learning. | Y | PRO | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 340-FSE | ProMod | Project-based learning. | Y | PRO | Y | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 340-HDA | ProMod | Project-based learning. | Y | PRO | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |
| ASU | 340-HNR | ProMod | Project-based learning. | Y | PRO | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 340-LA | ProMod | Project-based learning. | Y | PRO | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 340-NCIAS | ProMod | Project-based learning. | Y | PRO | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 340-NU | ProMod | Project-based learning. | Y | PRO | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 340-SOS | ProMod | Project-based learning. | Y | PRO | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 340-TB | ProMod | Project-based learning. | Y | PRO | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 340-TE | ProMod | Project-based learning. | Y | PRO | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 340-WPC | ProMod | Project-based learning. | Y | PRO | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ASU | 394-CLS | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ASU | 440-CHS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 0-18 | | |
| ASU | 440-CLS | ProMod | Project-based learning. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 0-18 | | |
| ASU | 440-CPSCS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 0-18 | | |
| ASU | 440-CS | ProMod | Project-based learning. | Y | LEC | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 0-18 | | |
| ASU | 440-FSE | ProMod | Project-based learning. | Y | LEC | Y | GNA | Ira A. Fulton Engineering | Ira A. Fulton Schools of Engineering | 0-18 | | |
| ASU | 440-HDA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 0-18 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ASU | 440-HNR | ProMod | Project-based learning. | Y | LEC | Y | GNA | Barrett, The Honors College | Barrett, The Honors College | 0-18 | | Prerequisite(s): Barrett Honors student |
| ASU | 440-LA | ProMod | Project-based learning. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 0-18 | | |
| ASU | 440-NCIAS | ProMod | Project-based learning. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 0-18 | | |
| ASU | 440-NU | ProMod | Project-based learning. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0-18 | | |
| ASU | 440-SOS | ProMod | Project-based learning. | Y | LEC | Y | GNA | School of Sustainability | School of Sustainability | 0-18 | | |
| ASU | 440-TB | ProMod | Project-based learning. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0-18 | | |
| ASU | 440-TE | ProMod | Project-based learning. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-18 | | |
| ASU | 440-WPC | ProMod | Project-based learning. | Y | LEC | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 0-18 | | |
| ATC | 230 | Fundamentals of Air Traffic Management | Introduces the manuals, procedures, maps, charts, and regulations used by air traffic controllers in the National Airspace System (NAS). | N | LEL | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Prerequisite(s): AMT 201 with C or better |
| ATC | 331 | Tower Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in ATC towers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 332 | TRACON Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA TRACONs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 333 | En Route Operations | Provides knowledge of air traffic control procedures, phraseology, equipment, and aircraft separation requirements used in FAA ATC En Route Centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: AMT 201 and ATC 230 with C or better |
| ATC | 431 | Tower Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 331 with C or better |
| ATC | 432 | TRACON Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 332 with C or better |
| ATC | 433 | En Route Operations and Procedures | Opportunity to operate in tower simulator environment to run scenarios for local and ground control and flight data/clearance delivery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisite: ATC 333 with C or better |
| ATC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Aviation Programs | 1-12 | | Prerequisite(s): minimum junior standing |
| ATC | 491 | Air Traffic Management Capstone | Overview of problem solution tools, quality metrics, and current technology initiatives related to air traffic management and related industry problems in a project environment. Student projects focus on airport and airspace requirements. Student teams work with partners from industry, government, and academia to define project objectives and work toward a formal recommendation to help solve the specified problem. Class discussions focus on project management, organizational structures, strategic initiatives, strategy implementation and execution. Uses review and analysis of current industry problems and resolutions to provide examples of practical solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Aviation Programs | 3 | | Pre-requisites: ATC 331, 332 and 333 with C or better; Pre/Co-requisite: ATC 431, 432, 433 with C or better if completed |
| ATE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 361 | Building Structures I | Introduces load distribution on structures. Static analysis of determinant beams, trusses, arches, and rigid frames. Computer applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisite: ADE 321 |
| ATE | 362 | Building Structures II | Strength of materials. Stresses in beams and columns. Thermal effects on structures. Analysis, design, and detailing of wood structural systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 361 with C or better |
| ATE | 451 | Building Systems I | Principles of solar radiation, heat and moisture transfer, and environmental control systems as form influences. Energy-conscious design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 421 |
| ATE | 452 | Building Systems II | Architectural design implications of heating, ventilation, and air conditioning systems. Principles of lighting, daylighting, and acoustics, and their applications. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: ATE 451 with C or better; Co-requisite: ADE 422 |
| ATE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| ATE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| ATE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ATE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| ATE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ATE | 521 | Building Environmental Science | Scientific principles relating to comfort and environmental control. Heat and moisture transfer. Solar/natural energies for heating, cooling, and lighting. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 550 | Passive Heating and Cooling | Theory, analysis, and application of passive and low-energy systems in order to maximize comfort and minimize energy consumption in buildings. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 553 | Building Systems III | Design and integration of building systems, including mechanical, electrical, plumbing, security, communications, fire protection, and transportation. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student; Co-requisite: ADE 521; ATE 563 |
| ATE | 556 | Building Development | Comprehensive design development through the understanding and integration of building materials and systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: ADE 522 and APH 505 |
| ATE | 560 | Building Energy Analysis | Computer simulation of building thermal behavior. Software review. Detailed study of selected simulation models using case study projects. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 562 | Experimental Evaluation | Instrumentation, measurement and computational techniques for analysis of building components, and assessment of thermal and luminous performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 563 | Building Structures III | Analysis, design, and detailing of steel buildings and frames. Lateral analysis of small rigid and braced frame systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Master of Architecture student |
| ATE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 582 | Environmental Control Systems | Heating, ventilation, and air-conditioning systems. Loads, psychrometrics, refrigeration cycle, air/water distribution, controls, energy performance standards, and utility rates. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Bldg Design MS, Master of Architecture, Master of Urban Design, or Master of Landscape Architecture student |
| ATE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ATE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| ATE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Herberger Institute of Design and the Arts Graduate student |
| ATE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |

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| AVC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| AVC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| AVC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| AVC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| AVC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| AVC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| BCH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): CHM 231 with C or better OR Pre- or corequisite(s): CHM 234 or CHM 334 with C or better if completed |

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| BCH | 361 | Advanced Principles of Biochemistry | Advanced consideration of the structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates, and lipids; principles and theory of the utilization and synthesis of these materials by living systems, and the relationship of these processes to energy production and utilization. The course is recommended for pre-health students. No credit for Biochemistry majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): CHM 231 with C or better OR Pre- or corequisite(s): CHM 234 or CHM 334 with C or better if completed |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisite: BCH 361 or LSC 366 with C or better if completed |
| BCH | 367 | Elementary Biochemistry Laboratory | Qualitative/quantitative analyses of constituents of biological systems, enzyme activity measurements and metabolic studies. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 354 (or LSC 355); Pre- or Co-requisites: BCH 361 or LSC 366 (with C or better if completed) |
| BCH | 371 | Modern Concepts in Biochemistry | Detailed examination of the chemical structure, conformation, and function of proteins, carbohydrates, lipids, and nucleotides; analysis of the energetics, enzymes, and control of the metabolic pathways by which these molecules are degraded or synthesized. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353; CHM 234; Credit is allowed for only BCH 371 or LSC 394 (Modern Concepts in Biochemistry) |
| BCH | 372 | Modern Concepts in Biochemistry Laboratory | Analyzes protein structure, purification, and function using spectroscopic, chromatographic, and electrophoretic methods. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: BIO 354; Pre/Co-requisite: BCH 371; Credit is allowed for only BCH 372 or LSC 394 (Modern Concepts in Biochemistry Laboratory) |
| BCH | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. May be repeated for total of 6 semester hours. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 461 | General Biochemistry | Structure, chemistry, and metabolism of biomolecules and their role in the biochemical processes of living organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): CHM 234 or CHM 334 with C or better; Corequisite(s): CHM 341 or CHM 346 |
| BCH | 462 | General Biochemistry | Continuation of BCH 461. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: BCH 461 with C or better |
| BCH | 463 | Biophysical Chemistry | Principles of physical chemistry as applied to biological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 341 or CHM 346 with C or better |
| BCH | 464 | Biophysical Chemistry Laboratory | Introduces physical methods in modern biochemistry. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: BCH 467 with C or better; Pre/Co-requisite: BCH 463 with C or better if completed |
| BCH | 465 | Protein and Nucleic Acid Biochemistry | Structure and function of proteins and nucleic acids, including protein folding, enzymology, proteomics, DNA/RNA structure, replication, transcription, and genomics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: BCH 461 with C or better; Co-requisite: BCH 462 |
| BCH | 467 | Analytical Biochemistry Laboratory | Quantitative analysis, separation and purification of biological molecules. Applies chemical and physical methods to the characterization of biological macromolecules. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | L | Pre/Co-requisite: BCH 462 with C or better if completed |
| BCH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | |
| BCH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BCH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BCH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| BCH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-7 | | |
| BCH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| BCH | 501 | Current Topics in Biochemistry | | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BCH | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: Graduate students (degree and nondegree); Credit is allowed for only BCH or CHM 520 |
| BCH | 561 | Advanced Topics in Biochemistry | Topics selected from emerging areas of biochemistry based primarily on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 568 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BCS | 101 | Elementary Serbo-Croatian | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 102 | Elementary Serbo-Croatian | See BCS 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| BCS | 201 | Intermediate Serbo-Croatian | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 202 | Intermediate Serbo-Croatian | See BCS 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| BCS | 311 | Bosnian/Croatian/Serbian Composition and Conversation I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 202 with C or better; Credit is allowed for only BCS 311, 394 (Serbo-Croatian Conv & Comp I) or SLC 394 (Serbo-Croatian Comp/Conv) |
| BCS | 312 | Bosnian/Croatian/Serbian Composition and Conversation II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: BCS 311 with C or better; Credit is allowed for only BCS 312 or 394 (Bosnian/Croatian/Serbian Composition and Conversation II) |
| BCS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| BCS | 495 | Serbo-Croatian for Heritage Speakers | Generates professional proficiency by developing communicative and written competency in standard literary Serbo-Croatian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |
| BDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BDE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 692 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BDE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 701 | Fundamentals of Biological Design I | Training in the essentials of fields underlying interdisciplinary research in the biosciences and in the integration of multiple disciplines in use-inspired research. Modules concentrate on key concepts and current questions in the biological sciences, physical sciences, and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 9 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 702 | Fundamentals of Biological Design II | Emphasizes the integrative areas of computational bioinformatics, systems biology, and synthetic biology, and their application in biomedical research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 721 | Integrative Research | Develops comprehensive solutions to societal problems by small interdisciplinary teams of students, including a proposal for research in an integrated science area. Covers issues of intellectual property, commercialization, societal impact and value, project management, product design, and historical examples of disruptive technological innovations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 722 | Research Design | Writing and presentation of a research proposal in the form of a grant application, peer review sessions to provide feedback, examination of the grant review and funding process. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 751 | Teaching in Science | Guidance in teaching and exposition through assisting a faculty teaching mentor in the Biological Design core course and training in oral presentation skills, including instruction in how to effectively present posters and seminars and participation in outreach experiences in the community. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| BIO | 100 | The Living World | Principles of biology. Cannot be used for major credit in the biological sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| BIO | 112 | Discovery: Why Sex? | "Why?" is a question that animates the youngest of children to the most seasoned of scientists. The acts of asking and answering "Why?" highlight the integrated nature of scientific knowledge and discovery. Demonstrates scientific disciplines are not walled cities in which knowledge is neatly segregated from lines of inquiry and knowledge in other disciplines. Instead, scientific concepts weave throughout and between disciplines and scientists increasingly rely on colleagues from different scientific fields to find answers to scientific questions. So our journey to find responses to the question "Why Sex?" takes us not just to biology, but also to earth science and to physics. Along the way, scientists are linked together not only through concepts that crosscut the disciplines, but also in their reliance upon key scientific skills such as the ability to observe, think critically, measure, gather data and communicate their findings. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Credit is allowed for only BIO 112 or BIO 194 (Discovery: Why Sex?) |

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| BIO | 113 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. <u>Cannot be used for major credit in the biological sciences.</u> | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 113 or LSC 294 t 2 (Dinosaurs) |
| BIO | 130 | Introduction to Environmental Science | Introduces the interconnected nature of Earth's hydrosphere, lithosphere (soils and rocks), atmosphere, and biosphere. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only BIO 130 or ABS 130 |
| BIO | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 151 | Biological Thinking | The science behind the science of life. Masters the core concepts of modern biology, understands the scientific discoveries that lie behind those concepts, and develops scientific reasoning skills so that students can contribute discoveries of their own. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Pre-requisite: Life Sciences student with a math placement score below 50; Credit is allowed for only BIO 100 or BIO 151 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 181 | General Biology I | Biological concepts emphasizing principles and the interplay of structure and function at the molecular, cellular, and organismal levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only BIO 181 or BIO 281 or BIO 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 182 | General Biology II | Biological concepts emphasizing principles and the interplay of structure and function at the organismal, population, and community levels. Intended for life sciences, biology, and health-related science majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Credit is allowed for only BIO 182, 281, or 282 |
| BIO | 189 | Life Sciences Career Paths | Overview of modern life sciences, including research trends, extracurricular opportunities, degree programs, and potential careers. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): Freshmen School of Life Sciences majors |
| BIO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| BIO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | |
| BIO | 201 | Human Anatomy and Physiology I | Studies the structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |
| BIO | 202 | Human Anatomy and Physiology II | Studies the structure and function of the human body. Topics include cardiovascular, respiratory, lymphatic/immune, endocrine, renal, digestive, and reproductive systems. <u>Cannot be used for major credit in the life sciences.</u> | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: BIO 201 with C or better |

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| BIO | 281 | Conceptual Approaches to Biology for Majors I | Covers the themes and concepts that underlie the molecular biology of cells and multicellular organisms as well as the biological processes that shape the diversity of organisms on our planet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | Prerequisite(s): School of Life Sciences student; Pre- or corequisite(s): STP 226 (or 231) with C or better if completed. Credit is allowed for only BIO 181, 182 or 281 |
| BIO | 282 | Conceptual Approaches to Biology for Majors II | Builds upon established conceptual foundations, covers the themes and concepts underlying organismal biology, with an emphasis on physiology and ecology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): School of Life Sciences student; BIO 281; Credit is allowed for only BIO 181 or BIO 182 or BIO 282 |
| BIO | 289 | School of Life Sciences Undergraduate Research Apprentice | Students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development in this seminar. Enriches individual lab research experiences students by bringing them together in a peer-community environment. Introduces students to the resources they have at their disposal (e.g. on campus, online) to facilitate research productivity and career planning. Rigorously evaluates their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Co-requisite: BIO 310, or BIO 494 (Advanced Study Practicum), or BIO/HPS/MBB/MIC/PLB 484/492/493/495/496/499, or MIC 401 |
| BIO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 300 | Natural History of Arizona | Plant and animal communities of Arizona. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SG General Studies credit | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG | |
| BIO | 301 | Field Natural History | Organisms and their natural environment. Cannot be used for major credit in the biological sciences. Both BIO 300 and BIO 301 must be taken to secure SQ General Studies credit | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | Pre/Co-requisites: BIO 300 or LSC 310 with C or better if completed |
| BIO | 302 | Cancer--Mother of All Diseases | History of cancer; disease statistics; pathogenesis; diagnosis, treatment and prevention; case studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): BIO 181 and 182 (or BIO 282) with C or better |
| BIO | 305 | Biology Behind the Crime Scene | Explores biological technology behind forensic techniques like fingerprinting, Polymerase Chain Reaction (PCR), and paternity testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | Pre-requisites: Minimum Sophomore standing |
| BIO | 306 | Modes of Biological Thought | Involves students in the process of biological discovery to examine how we identify truth in biological science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG101 or ENG 105 with C or better; BIO181 (or BIO188) and BIO182 (or BIO187) with C or better |
| BIO | 307 | Dinosaurs | Principles of evolution, ecology, behavior, anatomy, and physiology using dinosaurs and other extinct life as case studies. Geological processes and the fossil record. Weekend field trip required. Cannot be used for major credit in the biological sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisite: Minimum sophomore standing; Credit is allowed for only BIO 307 or LSC 294 (Dinosaurs) |
| BIO | 310 | Special Problems and Techniques | Qualified undergraduates may investigate a specific biological problem under the direction of a faculty member. | N | IND | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 311 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |
| BIO | 312 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312, IAS 340, or PHI 320 |
| BIO | 314 | Research Colloquium in Biology and Society I | Develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisites: BS Biology and Society Concentration majors; BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 315 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite: ENG 102, 105, or 108 with C or better. Minimum 35 hours. Credit is allowed for only ENG 370 or BIO 315 |
| BIO | 316 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| BIO | 318 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| BIO | 319 | Environmental Science (Nonmajor) | Environmental and biological concepts applied to ecological systems with a specific focus on analysis of problems caused by humans. Cannot be used for major credit in the Biological Sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | G | Pre-requisite: Junior class standing; Credit is allowed for only BIO 319 or PLB 320 |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 or 118 with C or better |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 or 118 with C or better |
| BIO | 320 | Fundamentals of Ecology | Organization, functioning, and development of ecological systems; energy flow; biogeochemical cycling; environmental relations; population dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 or 118 with C or better |

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| BIO | 321 | Introductory Ecology Laboratory | Lab and field observations and experiments to test current concepts and theories in ecology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 320 with C or better if completed |
| BIO | 322 | Conservation of Biodiversity | Species-level approaches to the protection, management, and restoration of biological resources from scientific and policy perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 323 | Ecosystem Restoration and Management | Ecosystem-level approaches to the protection, management, and restoration of biota and ecosystem processes from local to global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 324 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Credit is allowed for only BIO 324 or PHI 310 |
| BIO | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| BIO | 327 | Evolution of Human Behavior | Examines how evolutionary theory informs our understanding of human behavior, psychology and culture. Explores evolutionary explanations of human behavioral variation and cultural diversity and the influence of natural selection on shaping human cognition. Topics include nepotism, economic decisions, behavioral strategies throughout the life course, mate choice and sexual behavior, perception and judgment, motivation and emotions, social learning and culture, cooperation and prosociality, interpersonal violence and warfare, and norms and moral sentiments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s) with C or better: ASM 104 (or BIO 181 or 282). Credit is allowed for only ASM 342 or BIO 327 |
| BIO | 331 | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO or LSC 331 |
| BIO | 331 | Animal Behavior | Theories of evolutionary, genetic, physiological, and ecological bases of animal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO or LSC 331 |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 340 | General Genetics | Science of heredity and variation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisites with C or better: BIO 181 and 182 (or both PLB 200 and 201) OR BIO 181 (or BIO 281 or MBB 245) and MBB 247 OR BIO 281 and 282; non-Molecular Biosciences and Biotechnology majors only. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 342 | General Genetics Laboratory | Explores general principles of inheritance with special reference to Mendelian, molecular, and computational genetics via lab experiments. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 340 (with C or better if completed) |
| BIO | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisite: MBB 347 or BIO 340 with C or better; Credit is allowed for only BIO or MBB 343 |
| BIO | 344 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better; CHM 113 or 114 with C or better |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better; CHM 113 or 114 with C or better |
| BIO | 345 | Organic Evolution | Processes of adaptive change and speciation in sexual populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better; CHM 113 or 114 with C or better |
| BIO | 346 | The Darwinian Revolution | Intellectual and cultural history of Darwinism and modern evolutionary theory and their impact on 19th- and 20th-century thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| BIO | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 349 | MolecularGenetics:GenesProtein | Emphasizes molecular and cell biology and gene technology, both at the basic and applied research levels, in the growing areas of biotechnology and the molecular biosciences; focuses on molecular processes that allow genetic information to be expressed and regulated and by introducing applications to real-world situations. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 282 (or BIO 181 and 182); CHM 116. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| BIO | 351 | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better |
| BIO | 351 | Developmental Biology | Principles of developmental biology, including the development of major organ systems and their underlying molecular and cellular mechanisms. Illustrated mainly using vertebrate examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better |
| BIO | 352 | Laboratory in Vertebrate Developmental Anatomy | Morphology of representative embryonic and adult vertebrates. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; Pre/Co-requisite: BIO 351 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 181 and 182 (or PLB 200) with C or better OR BIO 281 and 282 with C or better OR MBB 245 and 247 with C or better; CHM 116 or 118 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 and 182 (or PLB 200) with C or better OR BIO 281 and 282 with C or better OR MBB 245 and 247 with C or better; CHM 116 or 118 with C or better |
| BIO | 353 | Cell Biology | Surveys major topics in cell biology, including structural, biochemical, and molecular aspects of cell function. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 and 182 (or PLB 200) with C or better OR BIO 281 and 282 with C or better OR MBB 245 and 247 with C or better; CHM 116 or 118 with C or better |
| BIO | 354 | Cell Biology Laboratory | Investigational lab using modern molecular and cellular techniques to analyze molecular, biochemical, and anatomical traits of cells. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisite: LSC 353 or BIO 353 (with C or better if completed) |
| BIO | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 281 and 282 with C or STP 220 or STP 231, or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPI 480 or MBB 355. |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 360 | Animal Physiology | Principles and mechanisms of physiological regulation in animals, with a focus on humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better; CHM 116 or CHM 118 with C or better |
| BIO | 361 | Animal Physiology Laboratory | Experimental lab studies of physiological mechanisms in animals and model systems. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 360 (with C or better if completed) |
| BIO | 370 | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s) with C or better: BIO 181 and 182 OR BIO 281 and 282 |
| BIO | 370 | Vertebrate Zoology | Characteristics, classification, evolution, and natural history of the major groups of vertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisite(s) with C or better: BIO 181 and 182 OR BIO 281 and 282 |
| BIO | 385 | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 385 | Comparative Invertebrate Zoology | Characteristics, life cycles, adaptations, and evolution of invertebrate animals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 386 | General Entomology | Specialized focus on form, activities, and classification of insects. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 389 | School of Life Sciences Undergraduate Researcher | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment; introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): School of Life Sciences majors; 3.00 GPA |
| BIO | 390 | Medical/Dental Field Placement | Field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |

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| BIO | 393 | Careers in Natural and Health Sciences | This seminar course is designed to provide students with proficiency in analyzing career options and to help students explore the full range of careers that are open to those who major at the undergraduate level in the natural sciences. The course will include short presentations by professionals in a variety of fields, including environmental biology, biotechnology, business, education, and various health sciences. There will be ample opportunities for questions and personal interactions. | N | LEC | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 188 or BIO 182; Minimum 45 hours |
| BIO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 406 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| BIO | 410 | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | 410 | Techniques in Conservation Biology and Ecology | Lecture, field, and laboratory experience in techniques used in conservation biology and ecology. Course is modular, with each module instructed by a discipline-specific expert (e.g., plant ecologist, mammal conservationist, soil ecologist). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: ENG 101 (or 105 or 107); BIO 320; BIO 322 or BIO 323 with C or better |
| BIO | 411 | Quantitative Methods in Conservation and Ecology | Quantitative methods in conservation ecology: develop mathematical models of ecological and natural resource systems and use the models to better understand and inform management of ecosystems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 320 or 322 with C or better; BIO 415 or STP 226 or STP 231 with C or better; MAT 210, 251, 265, or 270 with C or better |
| BIO | 412 | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | 412 | Conservation in Practice | Global biodiversity patterns, processes, and conservation; global environmental change; sustainable use of natural resources; emphasizing international approaches to conservation biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 322 and BIO 323 with C or better |
| BIO | 414 | Research Colloquium in Biology and Society II | Further develops critical thinking abilities, research methods, and writing skills for research in the interactions between biological sciences and society. Both BIO 314 & 414 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Pre-requisites: BIO 314 with C or better |
| BIO | 415 | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | 415 | Biometry | Statistical methods applied to biological problems, design of experiments, estimation, significance, analysis of variance, regression, correlation, chi square, and bioassay; the use of computers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | CS | Pre-requisites: MAT 210, 251, 265 or 270 with C or better, or a 200 level statistics course (STP 226, or 231) with C or better |
| BIO | 416 | Biomedical Research Ethics | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only for BIO 416 or HPS 410 |
| BIO | 417 | Experimental Design | Fixed, random, mixed models; crossed and nested factorial designs; balanced and unbalanced data; completely randomized, blocked, repeated measure designs; ANCOVA. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 415 with C or better |
| BIO | 418 | Soil Ecology | Soils viewed in an ecosystem context, soil-plant relationships, nutrient budgets, and abiotic factors that influence soil processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: ABS 370 or BIO 320. Credit is allowed for only ABS 434 or BIO 418 |
| BIO | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only PLB 419, 519, BIO 419 or 519 |
| BIO | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| BIO | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 422 | Ecosystem Ecology | Explores the structure, development and dynamics of ecosystems, with a focus on the exchange of energy and materials between the atmosphere, soils, water, biosphere, and anthro-sphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 422 or BIO 494 (Ecosystem Ecology) |
| BIO | 423 | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |

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| BIO | 423 | Population and Community Ecology | Organization and dynamics of population and communities. Theoretical and empirical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 320 or LSC 320 with C or better |
| BIO | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ASM, BIO or SOS 424 |
| BIO | 425 | Marine Conservation Ecology | Marine conservation biology is increasingly important for society, as evidenced by frequent media coverage and the recent report by the U.S. Commission on Ocean Policy. Expect exposure to multiple perspectives on important conservation issues in the marine environment and gain valuable experience in critical thinking, communication skills, and the use of science in effective | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181,182 with C or better OR BIO 281, 282 with C or better. Credit is allowed for only BIO 425 or BIO 494 (Marine Ecology and Conservation) |
| BIO | 426 | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 426 | Limnology | Structure and function of aquatic ecosystems, with emphasis on freshwater lakes and streams. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3-4 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 427 | Fire | A survey of fire on Earth--history, ecology, behavior, and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 428 | Biogeography | Environmental and historical processes determining distributional patterns of animals and plants, emphasizing terrestrial life. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 320 with C or better |
| BIO | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 431 | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 431 | Genes, Development, and Evolution | Contribution of genes, developmental processes, and evolution to pattern of phenotypic variation, including disease. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188); BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 117 or higher or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| BIO | 435 | Research Techniques in Animal Behavior | Experimental and field studies of animal behavior; description and quantification of animal behavior and interpretation of behavior within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 331 with C or better |
| BIO | 436 | Sociobiology and Behavioral Ecology | Surveys animal and human social behavior examined from ecological and evolutionary perspectives using theoretical and empirical constructs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 331 with C or better |
| BIO | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 with C or better; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| BIO | 443 | Applied Molecular Genetics and Genomics | Nature and function of the gene; emphasizes the molecular genetic disease states; molecular biology; regulation of gene expression; genomics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: LSC 347 with C or better; CHM 233 or 331 with C or better; CHM 237 or 335 with C or better |
| BIO | 446 | Principles of Human Genetics | Molecular and cellular analysis of the human genome. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): ASM 301 or BIO 340 or LSC 347 or MBB 347 with C or better; Credit is allowed for only ASM 446 or ASM 546 or BIO 446 or BIO 546 |
| BIO | 450 | Advanced Developmental Biology | Current concepts and experimental methods involving differentiation and biosynthetic activities of cells and organisms, with examples from microorganisms, plants, and animals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 351 with C or better |

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| BIO | 451 | Cell Biotechnology Laboratory | Mammalian cell culture techniques, including mouse embryonic stem cells, the use of bioreactors, cell fractionation, and digital video imaging. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 353 (or MBB 245) with C or better |
| BIO | 453 | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |
| BIO | 453 | Animal Histology | Microscopic study of animal tissues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 201 or MIC 220 or BIO 353 or BIO 360 with C or better |
| BIO | 455 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BMI 465 or BIO 455 |
| BIO | 456 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better; Credit is allowed for only BMI 466 or BIO 456 |
| BIO | 461 | Comparative Animal Physiology | A comparative approach to understanding the function of animal physiological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 462 | Endocrine Physiology | Mechanisms of action of hormones; endocrine control of homeostasis, growth, stress responses, and reproduction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 464 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| BIO | 465 | Neurophysiology | Detailed treatment of cellular and organismal neurophysiology and nervous system function. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 360 with C or better |
| BIO | 467 | Neurobiology | Introduces major areas of neurobiology, from fundamental cellular and molecular processes through systems neuroscience and neural bases of behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 360 with C or better |
| BIO | 469 | Computational Neuroscience: Case Studies in Neuroethology | Introduces the use of computational methods for understanding neural function at the cellular, circuit, and systems levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 360 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 471 | Ornithology | Biology of birds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 (or BIO 188) and 182 (or BIO 187) OR BIO 281 and 282 with C or better |
| BIO | 472 | Mammalogy | Classification, structure, habits, ecology, and distribution of mammals, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 473 | Ichthyology | Systematics and biology of recent and extinct fishes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 474 | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 474 | Herpetology | Classification, structure, habits, ecology and distribution of reptiles and amphibians, emphasizing North American forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 480 | Methods of Teaching Biology | Methods of instruction, experimentation, organization, and presentation of appropriate content in biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better |
| BIO | 482 | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIO 480 with C or better |
| BIO | 482 | Advanced Methods of Teaching Biology | Design, delivery, and evaluation of student-centered, inquiry-based lessons for high school biology students. Learning cycle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 480 with C or better |
| BIO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BIO | 489 | School of Life Sciences Undergraduate Research Fellow | While performing undergraduate research at ASU, students gain exposure to contemporary issues in research excellence, mentoring skills, and professional development. Goals include: enriching individual lab research experiences of each student by bringing them together in a peer-community environment; introducing students to the resources they have at their disposal (e.g., on campus, online) to facilitate research productivity and career planning; rigorously evaluating their research processes and products, in light of their eventual professional plans. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): School of Life Sciences majors; 3.50 GPA |
| BIO | 490 | Surgical Field Placement | Advanced field placement for students exploring a career in a health profession. Requires classroom sessions and fieldwork. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 390 with C or better |

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| BIO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| BIO | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| BIO | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| BIO | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, MIC, MBB, HPS or PLB 496 |
| BIO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIO | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| BIO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| BIO | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| BIO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 502 | Transmission Electron Microscopy | Theory, use, and methods of preparing biological materials for transmission electron microscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Pre/Co-requisites: BIO 504 |
| BIO | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 504, MCB 504, or BIO 598 Special Topic: Bioimaging Current Techniques; Credit is allowed for only BIO or MCB 503 |
| BIO | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| BIO | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Pre-requisites: Graduate student; Credit is allowed for only ASM, BIO or MCB 506 |
| BIO | 515 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| BIO | 516 | Foundations of Bioethics | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BIO | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| BIO | 518 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 518 or HPS or HST 516 |
| BIO | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 519, PLB 419 or PLB 519 |
| BIO | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| BIO | 522 | Populations: Evolutionary Ecology | Principles of population biology and community ecology within an evolutionary framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 527 | Environmental Ethics and Policy Goals | Advanced seminar in applied environmental ethics, focusing on the most influential and policy-relevant approaches in the field of environmental ethics. Core topics include the historical and philosophical foundations of alternative understandings of environmental responsibility; the debate over utility and preservation in environmental policy argument; and the interplay of ethical principles, scientific knowledge and societal priorities in environmental decision making. Consideration of the ethical and value dimensions of biodiversity conservation, wilderness protection, environmental valuation, environmental activism, climate change and sustainability, among other challenges. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 527 or SOS 527 or BIO 591 (Environ Ethics & Policy Goals) |
| BIO | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| BIO | 530 | Scientific Teaching | Guides graduate students to better understand issues related to undergraduate learning in science courses, and prepares students to become more effective teachers. Topics focus on emerging research that supports active and student-centered learning activities as well as methods that include the 5Es, concept-mapping, and "backward" design. Students reflect on their own teaching philosophy, and begin building an ePortfolio documenting and validating their ability to teach effectively. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 530 or 591 (Scientific Teaching) |
| BIO | 531 | Advanced Scientific Teaching | Further develops the teaching abilities of graduate students by applying knowledge into the more advanced teaching activities including large class sizes, diverse student populations, online delivery, and technology-integrated teaching. Students have more in-depth practice fully developing lesson plans, assessments and other teaching activities based on the concepts of evidence-based teaching. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 531 or BIO 594 (Advanced Scientific Teaching) |

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| BIO | 532 | Recent Papers in Discipline-Based Education Research | Discipline-based education research is a newly emerging scholarly field that combines the knowledge of teaching and learning with the deep knowledge of discipline-specific science content. Currently, discipline-based education research is being used to transform the way we teach undergraduate science courses. Readings in recent papers in the field of discipline-based education research, spanning the disciplines of physics, chemistry, geosciences and biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 537, KIN 494 (Comparative Biomechanics and Motor Control) or 598 (Comparative Biomechanics and Motor Control) |
| BIO | 543 | Molecular Genetics | Nature and function of the gene; emphasizes the molecular basis of inheritance and gene expression in prokaryotes and eucaryotes. Knowledge of general genetics recommended before registering for this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 545 | Populations: Evolutionary Genetics | Mathematical models in the description and analysis of the genetics of populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 546 | Principles of Human Genetics | Examines human molecular genetics from an evolutionary perspective, particularly analysis, current debates, the Human Genome Project, disease, ethics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM 446, 546, BIO 446 or 546 |
| BIO | 549 | Phylogenetic Biology and Analysis | Basic theory and general concepts of phylogenetic inference as well as practical, hands-on experience with many of the commonly used methods for inferring and interpreting phylogenetic trees. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 552 | Developmental Genetics | Genetic approaches to the analysis of development during the life cycle of eukaryotic organisms, and the role of genes in the unfolding of the differentiated phenotype. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 560 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ABS, BIO 560 or MAT 561 |
| BIO | 564 | Cellular Physiology and Signaling | Emphasizes the molecular basis for cell structure, function and intercellular signaling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ASM, BIO, or SOS 570 |
| BIO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 610 | Introduction to Responsible Conduct of Research (RCR) in Life Sciences | Introduces ethical and regulatory issues in the nine core areas of responsible conduct of research. Discusses real and hypothetical cases that tie broad ethical considerations to current concern of scientists. | N | REC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 611 | Current Topics in Responsible Conduct of Research (RCR) in Life Sciences | Explores a single topic in the responsible conduct of research in depth. Topic changes depending on current issues in responsible conduct of research as well as the interests of the instructor and students. Possible topics include: responsible authorship; conflicts of interest; human subjects research; and misconduct, data management, and academic integrity. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| BIO | 614 | Biometry | Fundamental concepts of statistics and how to apply a range of standard statistical tools to the analysis of biological data. Uses the software applications SPSS and R to carry out these tests, and how to identify the particular situations in which each test is appropriate. Topics include: basic probability, descriptive statistics, estimation, hypothesis testing, t-tests, analysis of variance, regression, correlation, chi-square analysis, randomization tests, and nonparametric statistics | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or HPS 620 |
| BIO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 300 | Theories and Applications of Organizational Studies | Critical analysis and application of organizational theory and conceptual perspectives to identify and solve problems, emphasizing personal and organizational application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum sophomore standing |
| BIS | 301 | Foundations of Interdisciplinary Studies | Introduces concepts and methods of interdisciplinary study by critically examining anticipated 21st-century workplace and civic trends. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): Interdisciplinary Studies major; minimum 2.00 GPA; ENG 102 or 105 or 108 with C or better; activation of BIS eligibility student group by a BIS advisor; one course meeting General Studies MA requirement |
| BIS | 302 | Interdisciplinary Inquiry | Explores interdisciplinarity and integration as applied to various approaches of human inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Interdisciplinary Studies major; minimum 2.00 GPA; BIS 301 with C or better; ENG 102 or 105 or 108 with C or better; one course meeting General Studies MA requirement |
| BIS | 340 | Organizational Skills | Develops and enhances skills needed in effective organizations such as communication and the use of technology. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): minimum junior standing or minimum 56 hours |
| BIS | 343 | Social Processes in Organizations | Examines the interdisciplinary nature of social processes and human interactions across a number of different organizational contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum junior standing or minimum 56 hours |
| BIS | 345 | Organizational Ethics | Explores and considers normative and applied ethics within a variety of organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum junior standing or minimum 56 hours |
| BIS | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours. Credit is allowed for only BIS 350 or OGL 350 |
| BIS | 353 | Interdisciplinary Leadership | Offers interdisciplinary perspectives on the theory and practice of leadership in a range of organizational environments | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum junior standing |
| BIS | 355 | Peace Corps Seminar | The Peace Corps: its mission, history, concerns and application process. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours |
| BIS | 357 | Assessment in Organizations | Considers the role and function of assessment in effective organizations. Provides the knowledge and tools required to identify, collect and analyze information to assess organizations. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): MAT 117 (or any course with General Studies MA designation); minimum junior standing or minimum 56 hours |
| BIS | 360 | Organizational Contexts | Explores how organizations function by analyzing in depth a specific organizational context like health care, family, education, government, community, religion or the economy. | Y | LEC | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum junior standing or minimum 56 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BIS | 370 | Dimensions of Liberal Studies | Critical analysis and application of concepts of liberal studies and its modes of inquiry. Prerequisite: BLS student; sophomore status; completion of first-year composition. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; Sophomore status; ENG 102, 105 or 108 with C or better |
| BIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 401 | Applied Interdisciplinary Studies | Applies interdisciplinary problem-solving skills in internships, service-learning, or research; may involve individual or group projects combining both concentrations. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies student; Minimum 2.0 GPA; BIS 301 with C or better; BIS 302 with C or better |
| BIS | 402 | Senior Seminar | Capstone course helps integrate classroom and experiential learning. Students choose among course topics that address their interests. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): Interdisciplinary Studies major; minimum 2.0 GPA; BIS 302 with C or better |
| BIS | 470 | Liberal Studies Seminar | Advanced analysis and application of theories and methods of human and social inquiry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: BLS student; BIS 370 with C or better; Senior status; ENG 102, 105 or 108 with C or better |
| BIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| BIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | OP4 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| BIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| BIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| BIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| BLE | 220 | Foundations of Structured English Immersion | Examines current educational practices and historical legal issues. Prepares teacher candidates with a provisional Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| BLE | 221 | Theories for Acquiring and Learning Languages | Languages are tools people use and learn to use for a variety of purposes. While nearly all people naturally acquire at least one language in their lifetime, the construct of bilingualism or multilingualism can occur as either an elective or a forced process. The context or the decision that leads to second or multiple language learning can have profound effects on the way and the extent to which those languages are learned. Examines the variables affecting both language acquisition and language learning as well as some methods to better facilitate these processes. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| BLE | 322 | Reading Methods in BLE/ESL Settings | Instructional/assessment strategies, including systematic, research-based phonics, vocabulary, comprehension, spelling, writing, phonemic writing in Spanish/English. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 324 | Social Studies for Diverse Language Classrooms | Social studies education standards, curriculum, and instructional strategies for English language learners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 335 | Language Diversity in Classrooms | Issues in sociolinguistics and language variation in schools with a focus on classroom interaction, instruction, curriculum, assessment, and language policy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 220; Admission to Professional Teacher Preparation Program |

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| BLE | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisites: BLE 396; Admission to Professional Teacher Preparation Program |
| BLE | 400 | Principles of Language Minority Education | Overview of philosophical and theoretical foundations of bilingual education and ESL models of instruction. Other topics include significant legislative and judicial measures. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 407 | SEI for Secondary Students | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the 7-12 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 408 | SEI for Linguistically Diverse Learners | Examines foundations, assessment, English language learner proficiency standards, and strategies (including SEI) for the K-8 classroom. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BLE | 411 | Science Curriculum, Instruction and Assessment in BLE/ESL Settings | Methods, management strategies, and assessment procedures for teaching science to BLE/ESL students in elementary schools. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 412 | Mathematics Curriculum, Instruction and Assessment in BLE/ESL Settings | Teaching, management, and assessment of mathematics in K-8 BLE/ESL settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 413 | Language Arts in BLE/ESL Settings | Literacy and language arts instruction; assessment of reading and writing; transition literacy skills, particularly critical reading of content. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 478 | Student Teaching in Diverse Language Classrooms | Student teaching in diverse language classrooms. Focuses on use of English language learning and bilingual strategies; integrates all previous course work. Synthesized experience in curriculum instruction and classroom management in a BLE/ESL setting. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 481 | Reading Practicum | Applies concepts from BLE 414. Supervised school-based experiences in teaching reading to BLE/ESL students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| BLE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BLE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| BLE | 496 | Field Experience III | Applies course content in a bilingual/ESL school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| BLE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| BLE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BLE | 511 | Introduction to Language Minority Education | Historical, philosophical, theoretical, and pedagogical foundations of language minority education in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 515 | Instructional Methods for Bilingual Students | Introduces general dual language teaching approaches. Focuses on the effective teaching of limited English proficient populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 520 | ESL for Children | Examines approaches to second-language development for children congruent with recent research in second-language acquisition in children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 522 | Literacy/Biliteracy Development | Acquaints teachers with first- and second-language literacy research, practice, and assessment in elementary school settings (Spanish-English emphasis) | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 527 | SEI for Middle and Secondary Schools | Prepares middle and secondary teachers and administrators in the areas required for Structured English Immersion endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BLE | 529 | Language Assessment and Evaluation of ESL/BLE Students | Assessment and evaluation of linguistic minorities; test theory, score interpretation; culturally responsive assessment; assessment of language and school achievement. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BLE | 533 | Literacy in Secondary BLE/ESL Settings | Examines first- and second-language literacy research, practice, and assessment across content areas in secondary school settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 535 | Sociolinguistic Issues in Bilingual Education | Surveys major theoretical issues (e.g., language situations, communicative competence, language attitudes) interrelating language, social processes, and bilingual education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 537 | Language Structure Acquisition | Introduces linguistics and language acquisition. Grammatical theory; language use in educational contexts; first, second, and simultaneous language acquisition. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only BLE 537 or LIN 510 |
| BLE | 541 | Nature of Bilingualism/Second-Language Acquisition | Bilingual and second-language acquisition, with emphasis on children and adolescents. Stresses cognitive, social, and cultural aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 561 | Parent Involvement in Language Minority Education Programs | Examines issues, approaches, and strategies for improving parental and community involvement in the schooling of language minority children and youth. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 597 | Capstone | Reflective, experience-based integration of theory and practice; professional development for individuals working with English language learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MA English as a Second Language major |
| BLE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

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| BLE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BLE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BMD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMD | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |
| BMD | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BMD 507 or BMI 507 |
| BMD | 510 | Current Perspectives in Biomedical Diagnostics | Seminar course using external speakers who review the current state of the biomedical diagnostics industry in terms of technology, regulation or legal issues. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BMD 511 or HCD 511 |
| BMD | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BMD 550 or BMI 550 |
| BMD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): Biomedical Diagnostics MS student |
| BMD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): Biomedical Diagnostics MS student |
| BMD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Biomedical Informatics Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| BMD | 667 | Regulation of Medical Diagnostics | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| BMD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 100 | Introduction to Biomedical Engineering | Introduces engineering design methods, experimental practices, data gathering, presentation and statistical analysis. Lecture/labs focus on device design and application, including hands-on experience. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Biomedical Engineering major |

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| BME | 101 | Introduction to Biomedical Engineering I: Belief Systems in Engineering | Biomedical engineering is a highly interdisciplinary field with a mixture of basic science, design, and application. Reviews the process of building a knowledge base, including how we form belief systems (both founded and unfounded). Understands how the scientific process works to generate "true" knowledge of the world and the dangers of denying fact. Teaches how BME uses science as a belief system to generate innovations that improve our quality of life. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 102 | Introduction to Biomedical Engineering II | Guides the student through the transition from how knowledge is generated by the scientific process/method to how the bioengineer uses the engineering method, design tools, and interdisciplinary skill sets to translate relevant scientific and related knowledge to create new healthcare technological solutions, i.e., medical device solutions, to address unmet biomedical and health care needs for individuals, as well as for society as a whole. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Corequisite: BME 101 |
| BME | 103 | Introduction to Biomedical Engineering III: Product Design & Development | Hands-on training in and implementation of selected product design skills necessary to successfully conduct engineering medical device product design using best industry practices. Runs concurrently with BME 101 and BME 102, which introduce the underlying theory that connects the principles of the scientific method with engineering design method in the practice of biomedical product research and development (R&D). Provides the beginning biomedical engineer with a hands-on design experience that connects product design theory with product development best practices via student exposure to the core elements of the engineering design process--specifically prototype conceptualization and realization. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering major; Pre/Co-requisite: BME 101; Credit is allowed for only BME 103 or 194 (Introduction to BME III) |
| BME | 111 | Engineering Perspectives on Biological Systems | Biological concepts for the emerging engineer. Introduces biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisite: Engineering student |
| BME | 112 | Engineering Perspectives on Biological Systems Laboratory | Introduces biological concepts for the emerging engineer in a lab setting: biological and earth systems engineering, materials, structures, fluid mechanics, bioelectricity, and the dynamic, nonlinear nature of nature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Engineering student |
| BME | 121 | Programming in Biomedical Engineering | Introduces computer programming in the context of scientific and engineering problem solving. Topics include loops, functions, pointers, data structures, and algorithms in the context of a biomedical problem. Culminates in an introduction to object-oriented programming, with a look at modern wireless (iPad and iPhone) devices for biomedical applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite: Biomedical Engineering student; Pre/Co-requisite: MAT 265 or MAT 270 |
| BME | 182 | Biomedical Engineering Product Design and Development I | Continuation of hands-on training and implementation of medical device product design and development skills; FDA-regulated U.S. and global medical device healthcare markets and opportunities, business development in regulated environments, medical product and project management planning, exempt and Class I medical devices, medical product component and device levels, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best-industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering BSE major |
| BME | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 200 | Conservation Principles in Biomedical Engineering | Applies bioengineering analysis and problem solving of mass, energy, and charge balances to medical and biological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): BIO 181, BIO 188 or BME 111 with C or better; CHM 114 (or CHM 116) with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 275 |
| BME | 201 | Anatomy & Physiology: Cell & Tissue Physiology | Introduces the major structural and functional characteristics of individual cells and tissues in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of basic cell and tissue systems in the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical engineering student; Pre/Co-requisites: BIO 181 with C or better if completed; CHM 114, 116 or 118 with C or better if completed |

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| BME | 202 | Anatomy & Physiology: Organs & Systems | Introduces the fundamental structural and functional characteristics of the major organs and systems in the mammalian body. Physiological principles in the context of biomedical problem solving. Describes the functions of fundamental physiology of organs comprised of the five tissue types of the body, describes how they interact in healthy and diseased tissues, and identifies how simple biomedical devices interface with these systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 201 with C or better if completed; Credit is allowed for only BME 202 or 294 (A&P: Tissues) |
| BME | 203 | Anatomy & Physiology: Lab | Laboratory introduction to the fundamental structural and functional characteristics of the major physiological systems in the mammalian body. Physiological principles in the context of biomedical problem solving in a lab. Describes how these systems interact in healthy and diseased biological states, and identifies how simple biomedical devices interface with these systems. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 201; BME 202; CHM 114, 116 or 118 with C or better if completed; Credit is allowed for only BME 203 or 294 (A&P: Systems) |
| BME | 211 | MATLAB & Mathcad in Biomedical Engineering | Introduces the basics of MATLAB and Mathcad programming in the context of biomedical engineering conservation of mass problem solving. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; CHM 114, 116 or 118 with C or better; BIO 181 with C or better; Pre/Co-requisites: PHY 131 or 151 with C or better if completed; MAT 274 or 275 with C or better if completed |
| BME | 212 | Conservation Principles | Basics of conservation principles in complex biological applications. Subsystem approaches to render a simplified approach to solving complex system problems with known and unknown variables. Application of MATLAB and Mathcad for solving conservation problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 211 (with C or better if completed) |
| BME | 213 | Biomedical and Bioengineering Ethics | Explores ethical issues in biomedical and medical sciences and engineering practices and includes professional ethics, medical ethics, engineering ethics and the Biomedical Engineering Society (BMES) Code of Ethics, the ethics of human and animal tissue and subjects use in biomedical science and engineering research, responsible conduct for research, ethical issues in the design and manufacture of medical devices for developing and developed countries, and the impact of biomedical engineering solutions on society and the environment. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student |
| BME | 214 | FDA Regulatory Processes and Technical Communications | Develops writing skills to factually and effectively communicate all facets of biomedical product design and development activities that are required to successfully conceive, develop, and launch a medical device into the market place using the FDA quality systems best practices that are utilized by the health care technology industry. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): ENG 102, 105, or 108 with C or better if completed |
| BME | 235 | Physiology for Engineers | Physiology of the nervous, muscular, cardiovascular, endocrine, renal, and respiratory systems. Emphasizes use of quantitative methods in understanding physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering major; BIO 181, BIO 188 or BME 111 with C or better, CHM 114 or 116 with C or better; Pre/Co-requisites: PHY 131 and 132 |
| BME | 282 | Biomedical Engineering Product Design and Development II | Hands-on training and implementation of product design skills that combine virtual analytical model prototype development with component and sub-assembly integration to develop both virtual and physical prototypes of a medical device product at the product architecture level and verify selected product architecture specifications from design input and earlier design process verification steps. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; BME 182 with C or better |
| BME | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| BME | 300 | Bioengineering Product Design | The fundamentals of financial and organizational structure of business and how it influences bioengineering analysis, design, and decision making; biomedical ethics and device and drug regulation; and fundamentals of business and technical management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering Junior, Senior or Post-Bac; BME 100 (or BME 101 and 102 and 103 OR BME 194 Introduction to BME I and II and III) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 301 | Numerical Methods in Biomedical Engineering | Applications of numerical methods to biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Biomedical Engineering student; MAT 274 (or MAT 275) with C or better |
| BME | 302 | Biomaterials/Physicochemical Properties | Introduces the science and engineering of biomaterials; addresses material properties of natural and artificial biomaterials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; PHY 121 (or PHY 150) with C or better; Pre/Co-requisite: BME 203 (with C or better if completed) |
| BME | 303 | Biological Response to Implanted Biomaterials | How biomaterials interact with surrounding tissue; biocompatibility. Also discusses specific clinical problems that are treated using implants. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 302 (with C or better if completed) |
| BME | 311 | Basic Concepts of Signals and Systems in Biomedical Engineering | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; EEE 202 with C or better; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 312 | Transforms for Biomedical Engineering Applications | Introduces properties of discrete and continuous transforms for the purpose of analyzing signals and applying the transforms to solve biomedical engineering problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student. Pre/Co-requisite: BME 311 (with C or better if completed) |

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| BME | 313 | Preclinical and Clinical Trials in Biomedical Engineering | Explores the rationale and the tools required to evaluate the safety and efficacy of medical devices designed and developed using best industry practices for human consumption. Introduces the design and conduct of pre-clinical trials (in vitro, ex vivo or in vivo systems other than humans), as well as clinical trials that are required for FDA approval to market medical devices in the U.S. Covers the following topics: an overview of medical device development; FDA regulatory affairs and practices; ethics concerns in animal and human trials; experimental design and biostatistics for medical device preclinical and clinical studies; preclinical (IACUC) and clinical trial (IRB) approval; informed consent best practices; medical device preclinical and clinical trial management; recruitment of clinical study participants and populations; ethics of preclinical and clinical trials; and alternatives to animal and human trials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 213 or BME 294 (Biomedical and Bioengineering Ethics) with a C or better |
| BME | 318 | Biomaterials | Material properties of natural and artificial biomaterials. Tissue and blood biocompatibility. Uses of materials to replace body parts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisites: Biomedical Engineering BSE student; CHM 114, 116, or BIO 181 (or BME 111 or BIO 188) with C or better; MAT 274 (or 275) with C or better |
| BME | 321 | Probability for Biomedical Engineering | Introduces probability distributions in the context of basic biological phenomena and biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: MAT 342 or MAT 343 (with C or better if completed) |
| BME | 322 | Statistics for Biomedical Engineering | Introduces parametric and nonparametric statistics tests in the context of common biomedical experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering major; MAT 274 (or 275) with C or better |
| BME | 331 | Transport Phenomena for Biomedical Engineering | Transport phenomena with emphasis on momentum, energy, and mass transport in living systems, medical devices, and other therapeutic/diagnostic applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Biomedical Engineering student; BME 200, 212 or 294 (Conservation Principles) with C or better; MAT 274 (or 275) with C or better; PHY 121 with C or better |
| BME | 341 | Engineering Design Method | Covers the engineering design method, a collection of valuable design tools, and the application of the method and tools to address current problems in the field of biomedical engineering. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; ENG 102, 105 or 108 with C or better |
| BME | 342 | 3D Spatial Modeling | 3D spatial modeling tools applied in the context of biomedical engineering to create computational models of idealized and anatomical biological structures (e.g., blood vessels). | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 100, 101, 103 or BME 194 (Introduction to Biomedical Engineering) with C or better; BME 203 or 294 (Cell Tissue Physiology) or 294 (A&P: Tissues) or 294 (A&P: Systems) with C or better |
| BME | 350 | Signals and Systems for Bioengineers | Applies principles of calculus and ordinary differential equations to analysis and computer processing of biosignals and linear modeling of biosystems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): MAT 274 (or MAT 275) with C or better |
| BME | 351 | Circuits for Biomedical Engineering Instrumentation | Circuits is a specialized skill that is developed for students interested in building devices which serve as electrical interfaces to the body. These are interfaces which have very specialized requirements. Students who have been familiarized with the basics of electrical circuit design as well as physiology learn some of the issues that arise and solutions that have been generated to provide for these interfaces. | N | LEL | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 312 or BME 394 (Transforms For BME Apps) with C or better |
| BME | 352 | Filtering of Deterministic and Stochastic Signals | Introduces properties of deterministic and stochastic signals and their use in biomedical signal processing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 312 or BME 394 (Transforms For BME Apps) with C or better if completed |
| BME | 353 | Microcomputing & Embedded Systems for Biomedical Engineering | Introduces the use of microcontrollers to analyze biological signals. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 352 (with C or better if completed) |
| BME | 361 | Design of Experiments and Clinical Trials | Explores advanced techniques in trial and experimental design in biomedical engineering, including testing new products or drugs, or even generation of new methods and treatments, designed to provide statistical confirmation at the end of trials. Design of trials, experiments, and measures, so that efficacy can be properly evaluated using statistical tests. Although this course makes reference to regulatory procedures, emphasizes the proper application of statistical techniques in the design of experiments. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; BME 322 or BME 394 (Statistics For BME) with C or better |
| BME | 370 | Microcomputer Applications in Biomedical Engineering | Uses microcomputers for real-time data collection, analysis, and control of experiments involving actual and simulated physiological systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Biomedical Engineering major; EEE 202 with C or better; BME 350 with C or better |
| BME | 382 | Biomedical Engineering Product Design and Development III | Continuation of hands-on training and implementation of medical device product design and development skills; experimental practices, data gathering, presentation, and statistical analysis in regards to demonstration of validation and verification tools and testing, identification and selection of customer needs, translation of customer needs, product specification development, virtual and physical prototypes, prototype product specification verification, product design and development process documentation, FDA regulatory best industry practices. | N | LAB | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: BME 282, or BME 213 and 214; credit is allowed for only BME 382 or BME 494 OR 598: Prototyping Dsn to Mkt |

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| BME | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 401 | Biomedical Engineering Product Design & Development: Capstone | Introduces global biomedical engineering design factors that affect the selection and implementation of medical device product innovation, design, and development using best industry practices. These include technical, regulatory, economic, legal, business, entrepreneurial, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 313, BME 331, BME 341, BME 342, BME 353 and BME 361 with C or better |
| BME | 402 | Biomedical Engineering Product Design & Development: Capstone II | Introduces project management and product innovation, design and development processes and their best practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 401 (with C or better if completed) |
| BME | 403 | Biomedical Engineering Product Design & Development: Capstone III | Introduces conceptual product design and development best practices using three-dimensional modeling and other design tools for the determination of product specifications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 401 and 402 (with C or better if completed) |
| BME | 404 | Biomedical Engineering Product Design & Development: Capstone IV | Introduces entrepreneurial biomedical product development business practices for successful quality systems premarket submission of a verified detailed medical device design of a capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 403 or BME 494 (Capstone III) with C or better |
| BME | 405 | Biomedical Engineering Product Design & Development: Capstone V | Introduces prototyping of the capstone device and begins experiments of the device prototype. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisite: BME 404 (with C or better if completed) |
| BME | 406 | Biomedical Engineering Product Design & Development: Capstone VI | Addresses prototype device verification and validation methods to achieve a robust design; the conclusion of the capstone project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisite: Biomedical Engineering student; Pre/Co-requisites: BME 404 and 405 (with C or better if completed) |
| BME | 413 | Biomedical Instrumentation | Principles of medical instrumentation. Studies of medical diagnostic instruments and techniques for the measurement of physiologic variables in living systems. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | L | Pre-requisites: Biomedical Engineering major; BIO 201 and 202 (OR BME 201 and 202 and 203 or BME 235) with C or better; BME 350 with C or better |
| BME | 416 | Biomechanics | Mechanical properties of bone, muscle, and soft tissue. Static and dynamic analysis of human movement tasks such as locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Pre-requisites: Bioengineering or Pre-Med Engineering BSE student; BME 318 and MAE 212 with C or better |
| BME | 417 | Biomedical Engineering Capstone Design I | Technical, regulatory, economic, legal, social, and ethical aspects of medical device systems engineering design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | L | Pre-requisite: BME 300, 318, 331 and 370 with C or better; IEE 380 (or BME 322) with C or better |
| BME | 419 | Biocontrol Systems | Applies linear and nonlinear control systems techniques to analysis of neuromusculoskeletal, cardiovascular, thermal, and mass transfer systems of the body. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 350 and BME 370 with C or better |
| BME | 421 | Biomedical Instrumentation I | Introduces principles of biomedical instrumentation and techniques of physiologic measurement as used in medicine and biology. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Pre-requisites: Biomedical Engineering student; BME 341 and 353 with C or better |
| BME | 422 | Biomedical Instrumentation II | Principles of biomedical instrumentation and techniques as used in medicine and biology with an emphasis on medical diagnostic imaging. | N | LEC | N | GNA | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): Biomedical Engineering major; Pre- or corequisite(s): BME 421 with C or better if completed |
| BME | 423 | Biomedical Instrumentation Laboratory | Lab experience with problems, concepts, and techniques of biomedical instrumentation in static and dynamic environments. Both BME 413 and BME 423 need to be taken together to secure L General Studies credit. | N | LAB | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | L | Pre-requisite: Biomedical Engineering student; Co-requisite: BME 413 |
| BME | 434 | Applications of Bioengineering Transport Phenomena | Develops mathematical models of transport phenomena in physiological systems, medical devices, and pharmacokinetic analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 331 with C or better |
| BME | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | |
| BME | 490 | Biomedical Engineering Capstone Design II | Individual projects in medical systems or medical device design and development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; BME 417 with C or better |
| BME | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| BME | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BME | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | |
| BME | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-7 | | Pre-requisite: Bioengineering or Pre-Med Engineering BS or BSE student |

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| BME | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-3 | | |
| BME | 520 | Bioelectric Phenomena | Study of the origin, propagation, and interactions of bioelectricity in living things; volume conductor problem, mathematical analysis of bioelectric interactions, and uses in medical diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 521 | Neuromuscular Control Systems | Overview of sensorimotor brain structures. Application of nonlinear, adaptive, optimal, and supervisory control theory to eye-head-hand coordination and locomotion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 522 | Biosensor Design and Application | Theory and principles of biosensor design and application in medicine and biology. Principles of measurements with biosensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 524 | Fundamentals of Applied Neural Control | Fundamental concepts of electrical stimulation and recording in the nervous system with the goal of functional control restoration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 525 | Surgical Techniques | Principles of surgical techniques, standard operative procedures, federal regulations, guidelines, and state-of-the-art methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 2 | | Pre-requisites: Graduate Engineering students only |
| BME | 526 | Introduction to Neural Engineering | Introduces the field of neural engineering. Neural engineering, as with all engineering fields, can be thought of as applied scientific understanding, in this case, applied neuroscience. Covers aspects of neurophysiology, neuroanatomy, neurosurgery, biophysics, electronics and signal processing; integrates these knowledge areas into neural engineering applications. Covers an entire process for conducting research in neural engineering: surgical implantation of electrodes, data acquisition, processing neural signals, decoding neural data, and controlling prosthetic devices. Provides foundation for working with neural engineering applications and conducting research in neural engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BME 526 or BME 598 (Intro to Neural Engineering) |
| BME | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| BME | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| BME | 561 | Clinical Neuroscience | Fundamental mechanisms that underlie diseases and disorders of the central and peripheral nervous systems. Introduces assessment and pharmacological, surgical and rehabilitative management of nervous systems disorders. Prior knowledge of neural systems is helpful. Identifies the mechanisms by which key disease and trauma states impact neural systems and how clinicians identify the locus and type of damage based on clinical and imaging criteria. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 566 | Medical Imaging Instrumentation | Design and analysis of imaging systems and nuclear devices for medical diagnosis, therapy and research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BME | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-4 | | Pre-requisites: Graduate Bioengineering students only |
| BME | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BME | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Harrington Bioengineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 101 | Introduction to Bioinformatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Introduces topics in translational bioinformatics, such as sequence alignment, the Human Genome Project, gene expression analysis, genome-wide association studies, next-generation sequencing. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 102 | Introduction to Public Health/Imaging Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Second course in a three-semester series focusing on biomedical informatics applications in public health, including population studies and outbreak detection, and medical imaging, including telemedicine. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: BMI 101 with B or better |
| BMI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 201 | Introduction to Clinical Informatics | Introduces existing and future applications of biomedical informatics. Overview of history and present state of the field. Provides an introduction to biomedical informatics techniques and applications used in clinical environments. Includes searching and organizing free text information, decision analysis techniques and clinical decision support systems, and clinical applications including physician order entry used in electronic medical records. Also covers challenges in clinical informatics, including sociotechnical and cognitive issues in implementation and use. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | |

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| BMI | 211 | Modeling Biomedical Decisions | First semester of a three-semester course sequence surveying the methods and theories underlying the field of biomedical informatics. Explores models of medical decision making, including classical decision theory, Bayesian, and cognitive models. Also includes a component discussing evaluation methods in biomedical informatics. | N | PRA | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 221 | Knowledge Representation for Biomedical Informatics | Introduces topics in knowledge representation and modeling, including frame-based systems, logic-based systems, rule-based systems, inference, and reasoning. Overview of history and present state of the field. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 301 | Clinical Environments | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and exposes students to the clinical environments in which health care providers create, manage, and use clinical information. Students attend lectures and spend a significant portion of time examining and reporting on different clinical settings throughout the semester. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 311 | Modeling Biomedical Knowledge | Introduces concepts of artificial intelligence and knowledge modeling using medical informatics examples. Historical foundations and motivations of AI in medical applications; problem solving, reasoning, knowledge management, and planning as applied to medical informatics problems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 312 | Modeling Biomedical Data | Third semester of a three-semester course surveying the methods and theories underlying the field of biomedical informatics. Explores methods of use in the design and maintenance of biomedical databases, machine learning techniques, information retrieval in biomedicine and other methods specific to bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 330 | Topics in Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medicine research. Topics include bioinformatics data acquisition and management, including microarrays, database modeling and integration; analysis methodologies, including statistics and data mining; and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 332 | Team Dynamics for Healthcare IT Projects | Teaches the fundamentals of leadership, management, and team dynamics in a project-focused software engineering environment, and with a focus on informatics and healthcare applications. Teaches students about team and group dynamics, recognizing dysfunctional teams, and helping to fostering productive group and leadership skills. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 461 | Advanced Topics in Biomedical Informatics I | Covers current trends and cutting-edge research areas of clinical, public health, and consumer health informatics. Particular emphasis on research that is of relevance to patients, and the healthy public, covering such topics as outbreak detection and the personal health record. Also covers research on the use of technology in medical education, and the ways in which clinical decision support systems are applied in contemporary medical practice. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 462 | Advanced Topics In Biomedical Informatics II | Covers current trends and cutting-edge research areas of bioinformatics, imaging informatics, and translational science. Emphasizes informatics approaches to the novel data sources that are supplied by the next generation of methods for affordable gene sequencing, and initiatives underway to accelerate the integration of novel research findings into everyday clinical practice. Includes a series on modeling and simulation, current approaches to computer-aided diagnosis of medical images, ways in which technology can support the discovery of new knowledge, and the application of telemedicine to remotely facilitate clinical care. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | |
| BMI | 465 | Introduction to Comparative Genomics | Explores genomic sequences and hypotheses for their structure, evolutionary history, and underlying mechanisms. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Credit is allowed for only BMI 465 or BIO 455 |
| BMI | 466 | Bioinformatics and Molecular Evolution | Fundamental biological motivation and methods used in bioinformatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisites: BIO 345 and 355 (or MBB 355, or MAT 355) with C or better; Credit is allowed for only BMI 466 or BIO 456 |
| BMI | 482 | Capstone I | First course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of a research project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | |

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| BMI | 483 | Capstone II | Second course in capstone sequence for biomedical informatics majors emphasizing the development of technical skills and effective team work within the context of an applied project in biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | L | Pre-requisite: BMI 482 with C or better |
| BMI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | |
| BMI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | | |
| BMI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-6 | L | |
| BMI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | |
| BMI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-7 | | |
| BMI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-3 | | |
| BMI | 501 | Introduction to Biomedical Informatics | Overview of the field of biomedical informatics for use of computers and information in healthcare and the biomedical sciences. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 501 or BMI 501 |
| BMI | 502 | Foundations of Biomedical Informatics Methods I | First semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 502 or BMI 502 |
| BMI | 504 | Introduction to Clinical Environments | Course is divided into three sections. The first section covers medical and health care concepts and terms, and discuss observational techniques. In the second portion, students investigate a variety of different clinical environments and report back to the class on their findings. The final portion summarizes the key points of information technology in these clinical environments. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): graduate BME or BMI major |
| BMI | 505 | Foundations of Biomedical Informatics Methods II | Second semester of a two-semester course surveying the methods and theories underlying the field of biomedical informatics. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 502 with C or better |
| BMI | 506 | Clinical Decision Support | The course will provide an in-depth analysis of computer-based approaches to supporting clinical decision making for providers and patients (as well as healthy individuals, for disease prevention/health maintenance). The history of the field of clinical decision support (CDS) and the spectrum of methodologies will be reviewed. Practical issues involved in successful implementations of CDS will be discussed. The roles of standards and infrastructure will be examined. Current research topics and foci will be explored. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 507 | Introduction to Digital Image Processing and Analysis | Core course with four sections for students seeking to concentrate in biomedical imaging informatics. The first section analyzes the concepts and terms of image processing and analysis. The second section evaluates key algorithms in image processing (e.g., image filtering, Fourier transform, image restoration). The third section examines advanced image analysis methods (e.g., image segmentation, mathematical morphology, image topology, shapes and boundaries, color processing, image coding and compression, wavelet, and special effects). The fourth section develops the practical applications of image processing and analysis in medicine and biology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BMD 507 or BMI 507 |
| BMI | 515 | Applied Biostatistics in Medicine and Informatics | Comprehensive treatment of the statistical methods used most often to analyze quantitative data collected in medical and biomedical informatics studies, including clinical trials, epidemiologic studies, studies of the accuracy and performance of screening and diagnostic tests, and studies to develop predictive models. Students learn to use SAS statistical software to analyze biomedical data. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 516 | Advanced Biomedical Data Analysis | Acquisition, conversion and organization of biological data into relevant diagnostic, therapeutic, and research information using information extraction and data mining. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 501 with C or better |
| BMI | 520 | Modeling Gene Regulatory Networks | Computational and mathematical modeling used to approximate gene regulatory networks as well as signaling pathways and inference of model parameters. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 505 with C or better; BMI 516 with C or better |

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| BMI | 540 | Problem Solving in Biomedical Informatics | Theory and practice of software engineering principles as they apply to large- and medium-scale clinical systems from bench to bedside. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 501 with C or better |
| BMI | 550 | Translational Bioinformatics | Provides an introduction to bioinformatics methods and applications used in the field of translational medical research. Topics include bioinformatics data acquisition and management, analysis methodologies, and applications. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BMD 550 or BMI 550 |
| BMI | 555 | Statistical Learning for Data Mining | Surveys data analysis methods for massive data sets and provides experience in analysis with computer software. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 515 or IEE 572 or IEE 578; Credit is allowed for only BMI 555 or IEE 520 |
| BMI | 560 | Teaching in Biomedical Informatics | Student serves as a teaching assistant with a faculty member who is teaching either a required or elective course in the Biomedical Informatics curriculum. Such courses will generally be BMI courses but with the approval of the student's faculty program advisor may include a course that is an approved elective in the BMI program but is offered in another department within the university. The experience provides a significant teaching role, either lecturing or moderating small group sessions or laboratories. Grading class homework assignments and designing/grading examinations will also typically be part of the experience. Assisting other students outside of class and being available during office hours will also generally be part of the student teacher's role. A student may also receive 1 hour of credit for participating substantively in the design of a new course, working closely with a faculty member. Generally in such circumstances the student should then serve as course teaching assistant when it is offered for the first time (separate enrollment in this course). | N | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Biomedical Informatics PhD student |
| BMI | 570 | BMI Symposium | Students attend the BMI Symposium Speaker Series twice a month and the student journal club discussion on alternate weeks. During the journal club weeks, each student leads a discussion on a current topic pertinent to the field of biomedical informatics. | N | SEM | Y | YGB | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: BMI Graduate student |
| BMI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: BMI Graduate student |
| BMI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): Biomedical Informatics MS student |
| BMI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): Biomedical Informatics MS student |
| BMI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Biomedical Informatics Program | 1 | | Prerequisite(s): graduate Biomedical Informatics student |
| BMI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Pre-requisite: Biomedical Informatics Masters student |
| BMI | 601 | Fundamentals of Health Informatics | Offers an overview of the field of health informatics. Combines perspectives from medicine and computer science for use of computers and information in health care and the health sciences. Includes an overview of health information literacy and data standards. Covers specific applications and general methodology in health informatics using current topics in the field. Discusses evaluations of health systems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMI | 602 | Programming in a Health Care Domain | Intensive introduction to object-oriented programming concepts focused on the unique challenges such as those related to data volume, complexity, and uncertainty inherent to applications in a health care domain. Also covers the fundamentals of algorithm analysis and data structure design. Stresses a software engineering approach to abstraction for problem decomposition and solution formulation, with object-oriented and reusability concepts introduced early. Emphasizes the use of generic data structures and abstractions from template libraries for reusability, as well as modular design. In addition, also covers basic concepts of algorithms and data structures. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 603 | Health Informatics Database Modeling and Applications | Thorough coverage of the foundations of database systems and their specific use and modeling in healthcare and biomedical environments. Students learn through hands-on experience with the modeling and implementation of health-related databases using the relational approach. Topics include an overview of database models and architecture, database design, SQL, XML, and data warehousing as they are applied in clinical domains. Students are encouraged to explore database-related topics of their own, choosing ones that are relevant to a bioinformatics or clinical domain. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 604 | Health Information Literacy | Students learn to locate, retrieve, and store information with an emphasis on electronic search, retrieval, and storage. They also learn to assess the validity and quality of information, improve the quality of information, and how to improve the quality of, protect, and effectively communicate health information. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 605 | Health Information Systems and Applications | Explores the use of information systems in different health care settings, analyzing operational and strategic objectives for their deployment. Emphasizes the analysis of the different factors that influence decision making during the process of design and deployment of systems, including human factors, hardware, software, policy, communications, and the successful management of such systems. Also covers guidelines for the design and successful deployment of systems to meet those objectives and includes discussion of architectures, components, and models. Analyzes specific case studies of successfully and unsuccessfully deployed systems. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 606 | Health Data Standards | The cost-effective delivery of high quality, safe healthcare requires access to multiple data sources and systems and applications responsible for data acquisition and management, the ability to aggregate, integrate, and analyze data from multiple sources, and the ability to communicate the results of such analyses or the knowledge resulting from those analyses to users in a timely fashion at points where they are needed. A variety of standards are required, at the data and communication level. Reviews the state of these standards, and the multiple entities that have a stake in them, and enables the student to navigate this complex process in selecting, implementing, or extending health systems in a variety of settings. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 1 | | Pre-requisite: Health Informatics MAS student |
| BMI | 607 | Effective Professional Communications | To be able to work in the field of biomedical informatics or health information technology requires an understanding of not only science and technology but also biomedicine and healthcare. This requires both familiarity with the basic concepts of these fields, as covered in other courses, as well as the ability to present ideas clearly in both written and oral communication. Also requires the ability to work effectively in groups, with shared understanding of group and individual roles, assignments, and responsibilities. Provides experience with oral, written, and group communication tasks, and uses critique and feedback as a method for highlighting issues and areas for improvement. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 2 | | Pre-requisite: Health Informatics MAS student |
| BMI | 608 | Project Management for Interdisciplinary Teams | Introduces students to the health care team and explores tools and techniques for establishing effective interdisciplinary teams in a health care setting, emphasizing collaborative clinical decision-making and patient management. By working in small teams, the course puts into practice these techniques, allowing students to collaborate with other health professionals to solve specific problems, provide services, or develop new understandings. Also covers the concepts, skills, tools, and techniques involved in the management of information system projects, providing an introduction to the established discipline of project management, with a specific focus on how they apply to managing information systems for a biomedical setting. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMI | 609 | Capstone | This course assists students in preparing their capstone project, which represents the culmination of their study for the MAS in Health Informatics focusing on development process, technical skills, and communication. | N | LEC | N | OPT | College of Health Solutions | Biomedical Informatics Program | 3 | | Pre-requisite: Health Informatics MAS student |
| BMI | 610 | Clinical Culture and the Health Care Environment | Designed for medical informatics students who have no significant clinical experience in the U.S. Introduces medical terminology and reviews clinical environments in which health care providers create, manage and use clinical information. Students perform observations in a variety of clinical environments. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 611 | Applied Data Analysis | Students learn what statistical methods are used most widely in the analysis of data from studies of disease risk factors, health interventions, and health care improvements, and what statistical methods should be used to analyze data from various types of studies. They learn how to estimate the number of subjects needed for studies of various designs. They learn to conduct and interpret multiple linear, multiple logistic, and multivariate life table analysis. Hands-on experience in the use of statistical software to conduct analysis of health data. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 612 | Applied Data Mining | Comprehensive introduction to data mining methods and algorithms used most often to analyze data collected in biomedical informatics studies, including genomics and proteomic disease association studies, clinical trials, clinical image analysis and studies of the accuracy and performance of screening and diagnostic tests. Emphasizes assessing data quality, understanding how to select an overall approach to analysis, and presenting and interpreting the results of data mining analysis. Students learn to use Excel to effectively display data collected in biomedical research studies and Weka software to analyze data using approaches that are used commonly in biomedical studies. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 613 | Workflow Analysis and Redesign in Health Systems Engineering | Provides an overview of workflow analysis and process redesign and their use in quality improvement activities, including specification. Uses case examples to highlight key concepts and measurement concepts and covers techniques. Includes the links of systems engineering to fundamentals of decision theory, statistics and optimization. Includes discussion of current successful techniques for systems engineering. System engineering seeks to enable the successful design, implementation, deployment and maintenance of successful systems. Emphasizes gathering and analysis of customer needs for the specification and documentation of required functionality early in the system's lifecycle. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 614 | Health Systems Engineering | Focuses on the links of systems engineering to fundamentals of decision theory, statistics, and optimization, and includes discussion of current successful techniques for systems engineering. System Engineering seeks to enable the successful design, implementation, deployment, and maintenance of successful systems. Emphasizes gathering and analysis of customer needs for the specification and documentation of required functionality early in the system's lifecycle. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 615 | Human Factors Engineering for Biomedical Applications | Fundamental principles of human-computer interaction and human factors and how to apply them to real-world problems through class projects, homework, and real-world design. Focuses on learning why user-friendly interfaces can greatly improve work productivity and enhance the quality of healthcare without radically changing the underlying technology. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 616 | Clinical Decision Support and Evidence-Based Medicine | Focuses on the major problems of human decision making in health care including causes of errors, decreased quality and increased costs. Explores the role of information technology, primarily through computer-based clinical decision support (CDS), to address these problems. Explores key methods used to provide CDS, the capabilities and limitations of current approaches, and the challenges for managing and updating the knowledge needed to deliver CDS in an enterprise setting. Origins of evidence-based decision making and policy formulation; how to use the tools and approaches that have been developed to support evidence-based decision making and policy formulation; and the history and evolution of systematic review and meta-analysis as a tool to inform decisions and policies based on evidence. Students gain hands-on experience by conducting a systematic review and a meta-analysis and using the results to draw conclusions and formulate health policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMI | 617 | Principles of Evidence-based Medicine | The origins of evidence-based decision making and policy formulation; how to use the tools and approaches that have been developed to support evidence-based decision making and policy formulation. The history and evolution of systematic review and meta-analysis as a tool to inform decisions and policies based on evidence. Hands-on experience by conducting a systematic review and a meta-analysis and using the results to draw conclusions and formulate policy. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 2 | | Prerequisite(s): Health Informatics MAS student |
| BMI | 618 | Leadership and Change in Clinical Environments | Covers core concepts related to leadership and specific methodologies used by effective leaders, including running meetings, negotiation, and conflict management. Also reviews change management as a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. Provides exposure to various models and processes related to change management and the tradeoffs between these different approaches. Includes case examples related to health information. | N | LEC | N | GNA | College of Health Solutions | Biomedical Informatics Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Biomedical Informatics Program | 1-12 | | Prerequisite(s): Biomedical Informatics PhD student |
| BMI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): Biomedical Informatics PhD student |
| BMI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | Biomedical Informatics Program | 1-15 | | Prerequisite(s): Biomedical Informatics PhD student |
| BMY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 501 | Essentials of Biomimicry | Offered as a sampler of the various topics (discipline, emulate, ethos, (re)connect and iSites, human-nature connection, biomimicry yhinking, and life's principles) within the discipline of biomimicry. Each week is devoted to a specific topic and is led by a different instructor. Provided a basic overview of each aspect of the discipline with ample opportunity for conversation and dialogue around the specific components, with an understanding that greater depth into each topic can be learned by taking the advanced BMY courses. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 502 | Life's Principles | Life's principles are nature's universal design guidelines based on 3.8 billion years of successful strategies across all life. With instruction by Dr. Dayna Baumeister, this 16-week online course takes participants on a deep dive of life's principles, including the review and study of life's operating conditions, the six primary principles and their related sub-principles. Gives participants the experience necessary to bring these design guidelines into practice. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 503 | Biology Taught Functionally | Biomimicry teaches biology through the lens of function, thereby providing a core understanding in biology for all students, no matter their background. Explores how biologists gather and research information and how that knowledge can inform other disciplines. Also introduces the art of translating biological concepts into strategies for application, which is then carried throughout all the courses. Students learn how to work with biologists on a biomimicry team and how to weave biology and biomimicry together. The biologists in the cohort not only learn to look at nature through the function lens, but also act as subject matter experts for their interdisciplinary teams and teaching assistants. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 504 | Biomimicry Thinking | Biomimicry thinking is the practice of biomimicry from a methodology-based approach. 16-week intensive in the methodology of biomimicry reviews how biology and biomimicry can be incorporated into the four major phases of any design process: scoping, discovering, creating and evaluating. Covers the art of translating biological concepts into strategies for application and building a taxonomy of design principles. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMY | 511 | Biomimicry and Design | Biomimicry is innovation inspired by nature, or the conscious emulation of nature's genius. Prepares participants to design sustainable innovations using the biomimicry philosophy and methodology. Participants complete a 16-week series of lectures and assignments to demystify the design thinking process, understand how to harness the potential of approaching challenges with a design mind, distill a design challenge, understand user needs, build a bridge between biology and design, use a methodology for discovering models from nature, abstract design principles from bio-inspired strategies, and translate those principles into sustainable innovations. Participants both with a design background and without equally experience a deep immersion into the world of biomimetic design. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 512 | Biomimicry and Engineering | Prepares participants to understand the field of engineering; identify the types of engineers and what each one does; what constrains engineers' work under, materials selected by engineers, how to present biological ideas to engineers and how to integrate ideas from their discipline into sustainable engineering designs using biomimicry principles. Most examples used are of large engineered structures. These structures play critical functions in human systems, have a significant impact on the environment and last for over a 100 years, so it is important to imbed as much sustainability into their design as possible. Requires a final team project designed to put these ideas into practice. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 516 | Biomimicry and Business | Addresses business topics from the biomimicry point of view, explains mechanisms and tools for comparing and contrasting business and nature. Challenges participants to question conventional ways of conducting business and come up with new approaches based on a different point of view. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 517 | Human-Nature Connection | Grounds the emerging discipline of biomimicry as a continuation of our ancestral connection with nature. Human-Nature Connection (HNC) engages participants in an exploration of the meaning and value of connecting with nature. Topics include defining humans, nature, and our connection with nature; establishing the evolutionary, personal, and socio-cultural influences on the different expressions of this connection; and illustrating the relevance of biomimicry to the human-nature connection. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 530 | Virtual Design Lab Practicum | Practicum designed to allow participants to dive deep into the biomimicry tools and resources presented during the program and to apply them selectively to a specific and unique opportunity of the student's choosing. Projects should have a meaningful outcome achievable within the semester, and should engage the scoping, discovering, creating and evaluating phases of biomimicry thinking. Deliverables are milestone based, and the final deliverable should have application in a real-world setting. | N | LEC | N | OP2 | Liberal Arts and Sciences | School of Life Sciences | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| BMY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BMY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BMY | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 330 | Organizational Leadership | Strategies, skills, and techniques that promote successful leadership within organizations. Practice leadership skills and self-discovery in preparation for leadership positions. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| BUA | 380 | Small Business Leadership | Develops leadership skills needed to form, lead, and operate a small business. Emphasizes creating a vision, research, and problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 381 | Small Business Accounting and Finance | Accounting and finance skills needed by small business owners to acquire, allocate, and track monetary resources and evaluate performance. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. Must not have earned credit in ACC 382. |
| BUA | 383 | Small Business Working Relationships | Addresses communication and the people in a business-- clients, employees, suppliers, competitors, governments, family, and self development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 384 | Small Business Operations and Planning | Planning and executing plans--the what, when, where, how, and who from product/service/project idea to pay back or completion. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR Non-degree student with a minimum ASU Cum GPA of 2.00, OR Graduate student. |
| BUA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 440 | Strategic Management | Strategic formulation and administration of the total organization, including integrative analysis and strategic plan; interrelationship of business functional areas. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better; Credit is allowed for only AGB 414, BUA 440 or 441 |
| BUA | 441 | Entrepreneurship and Feasibility | Assessment of the opportunities, risks, and challenges associated with business start-up and continued operation. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | Pre-requisites: Agribusiness senior; FIN 300 with C or better; MGT 300 with C or better; MKT 300 with C or better; SCM 300 with C or better; Credit is allowed for only AGB 414, BUA 440 or 441 |
| BUA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Morrison School of Agribusiness | 1-6 | L | Prerequisite(s): Barrett Honors student |
| BUA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| BUA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-7 | | |
| BUA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| BUE | 480 | Teaching Business Subjects | Organization and presentation of appropriate content for business subjects in the secondary school. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 481 | Technology in Business and Vocational Education | Emerging curricula and instructional technology in business and vocational education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| BUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| BUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| BUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| BUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| BUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| BUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| BUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| BUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 0.5-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| BUS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisite: W.P. Carey Degree-seeking Graduate student |
| BUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| BUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| CBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CBS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman Standing; Maximum 25 hours |
| CDE | 232 | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| CDE | 232 | Human Development | Lifespan development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| CDE | 337 | Early Childhood Intervention | Explores how child development theory affects practice with children and families, emphasizing development of young children and early intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| CDE | 338 | Child Development Practicum | Supervised practicum in the Child Development Lab preparing students for work in child care centers and agencies serving young children and families. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 2-4 | | |
| CDE | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| CDE | 356 | Race and Child Development | Reviews the current research and literature about the particular role of race in child development. Even though race is not a valid biological construct, it has significant social implications as it shapes how children interact and are treated by others. Through primarily class discussions/activities, presentations and papers, addresses: (1) What are the research and theoretical issues in studying race? (2) What does race and racism mean? (3) How does race influence developmental processes? | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): APA 200 or APA 210 or 30 hours. Credit is allowed for only APA 356 or CDE 356 or APA 394 (Race and Child Development) |
| CDE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better; Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDE | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101 or FAS 330 or PGS 101 or SOC 101 with C or better; Minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| CDE | 430 | Infant/Toddler Development in the Family | Examines the development of infants/toddlers, the socialization processes of families, and the interactions of these processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| CDE | 450 | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better; Minimum Junior standing |
| CDE | 450 | Child Dysfunction in the Family | This course will provide a focused study of the development of dysfunction within the family context. Other contextual influences will also be considered. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 232, PGS 101, or SOC 101 with C or better; Minimum Junior standing |
| CDE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| CDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| CDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| CDE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| CDE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | L | |
| CDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| CDE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| CDE | 531 | Theoretical Issues in Child Development | Major developmental theories, related research, and their application to family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 533 | Research Issues in Child Development | In-depth exploration and critique of research focusing on child development in a family setting. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 534 | Risk and Resilience in Children and Adolescents | Integrates child development, family theory, and research to understand risk and resilience in children and adolescents. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: CDE 531; FAS 500 |
| CDE | 570 | Child Development for Infant Family Practice | Examines development during infancy and early childhood with an emphasis on social and emotional development, mental health, and early parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 571 | Infant Mental Health for Infant Family Practice | Surveys the biological and environmental risk factors that jeopardize the mental health of infants and young children; overview of prevention and intervention strategies. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 572 | Assessment of Infants, Toddlers, and Families for Infant Family Practice | Developmentally appropriate assessment of mental disorders and developmental disabilities in infants, toddlers, and preschool children and parent-child relationships. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 573 | Cultural Competence for Infant Family Practice | Examines cultural issues impacting parent-child relationships and child rearing and the effectiveness of infant mental health and early intervention services on families of various ethnic and cultural backgrounds. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 574 | Observation and Reflection for Infant-Family Practice | Strategies for observing infant behavior and parent-child relationships and skills for reflective, relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 575 | Advanced Observation and Reflection for Infant-Family Practice | Advanced strategies for observing infant behavior and parent-child relationships and skills for reflective relationship-based intervention. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 576 | Applied Research Methods for Infant Family Practice | Survey and critical examination of child development, parent-child relationships, family relationships, and early intervention research and the application to IFP. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-IFP student |
| CDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CDE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending these or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 610 | Gender Development | Examines current theories and research concerning the various aspects of gender and developmental change. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 612 | Children's Peer Relationships | Studies scientific theory, research, and evidence on peer relationships and social competence from early childhood through adolescence. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: CDE 531 with C or better |
| CDE | 634 | Prevention and Child Development | Advanced training in research and theory-based approaches to developing and evaluating prevention programs for children at risk. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite: CDE 534 |
| CDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending these or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 501 | Digital Humanities: Critical Theory and Methods | Digital technologies are now intricately woven into our lives--whether it's in terms of authoring a paper in a text editor, sending texts and emails, or doing data analysis. Popular narratives of the "big" and the "new" celebrate and sometimes bemoan the ways that these tools shape our communication, access to information, habits and even our physical bodies. Focuses on the histories of these technologies, their operations, popular conceptions about such tools, and their affordances and limits for humanities scholarship. Students learn how to leverage digital technologies, but also how to critically read them. Broad ranging; in addition to surveying the "big tent," students are encouraged to utilize their final projects to engage with specific disciplinary digital tools and methods relevant to their scholarly work. | N | LEL | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): enrolled in Digital Humanities certificate program |
| CDH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CDH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CDH | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 250 | Career Development | Covers models of the individual, the world of work, and decision making with emphasis on individual application. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | |
| CED | 294 | Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| CED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| CED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| CED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| CED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 501 | Intro to Research and Evaluation in Counseling | Introduction to the basic models of research and evaluation in the field of counseling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking).; Credit is allowed for only CED 501 or 591 (Res. & Eval. in Counseling) |
| CED | 502 | Counseling Research Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate counseling research problems using statistical software. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CED 502 or CED 591 (Counseling Research Data Analysis) |
| CED | 522 | Theories of Counseling and Psychotherapy | Presents major theories of psychological intervention as well as underlying personality theory upon which they are based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 523 | Psychological Tests | Standardized tests in the study of the individual, with emphasis on test score interpretation in counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 525 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: COE 501 |
| CED | 527 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 528 | School Counseling | Introduces counseling within multicultural settings. Emphasizes counseling, consultation, and coordination skills needed for schools' comprehensive developmental guidance programs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 534 | Occupations and Careers | The world of work, career development, education, and training for occupational entry and mobility. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 545 | Analysis of the Individual | Theory and methods commonly used in studying the individual. Observational methods, diagnostic interviews, structured, and semi-structured methods for assessing personality. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 567 | Group Dynamics and Counseling | Group process factors, theory, and diversity issues determining effective interaction in small groups. Emphasis placed on lectures, self awareness, and experiential components. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CED | 577 | Counseling Prepracticum | Focus on racial, social, and cultural factors in the development of helping relationships through integration of cognitive and affective self-awareness with counseling skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling Psychology MC or PhD student |

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| CED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CED | 672 | Marriage and Family Counseling | Introduces marriage and family counseling theories. Emphasizes a systems-communication model utilizing cocounseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Counseling Graduate student |
| CED | 685 | School Counseling Internship | Structured practical experience in school counseling following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Masters of Counseling major |
| CED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate student |
| CEE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | HU | Credit is allowed for only CEE 181, FSE 181, or SOS 181 |
| CEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |
| CEE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CEE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |
| CEE | 281 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 300 | Engineering Business Practice | Engineering economic principles, cost/benefit analysis, project financing and delivery, management of engineering design, business practices, ethical and professional responsibilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | L | Pre-requisites: Engineering BSE student; Junior or Senior standing; MAT 267 with C or better |
| CEE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering BSE major; CEE 212 or CNE 212 or MAE 212; CEE 213 or CNE 213 with C or better; Credit is allowed for only CEE 321 or CNE 321 |
| CEE | 341 | Fluid Mechanics for Civil Engineers | Fundamental principles and methods of fluid mechanics forming the analytical basis for water resources engineering. Conduit and open channel flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: BSE Civil Engineering student; CEE 212 (or CEE 211 or MAE 212) and CEE 213 with C or better; Pre/Co-requisite: CEE 384 or MAE 384 (with C or better if completed) |
| CEE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 351 |
| CEE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 353 |
| CEE | 361 | Introduction to Environmental Engineering | Concepts of air and water pollution; environmental regulation, risk assessment, chemistry, water quality modeling, water and wastewater treatment systems designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 213 with C or better; CHM 114 or CHM 116; Pre- or corequisite(s): IEE 380 |

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| CEE | 372 | Transportation Engineering | Fundamental background of highway and traffic engineering in the areas of planning, design, and operations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | | Pre-requisites: Civil Engineering BSE student; CEE 213 with C or better; Pre/Co-requisite: IEE 380 |
| CEE | 384 | Numerical Methods for Engineers | Numerical methods and computational tools for selected problems in engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | CS | Prerequisite(s): Fulton Engineering undergrad; MAT 274 or 275 with C or better; MAT 242 or 343 (or 342 for non-MAE student) with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if complete; Credit allowed for only MAE 384 or CEE 384 |
| CEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 400 | Earth Systems Engineering and Management | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CEE | 412 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and 353 with C or better; Credit is allowed for only CEE 412 or 511 |
| CEE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better. Credit is allowed for only CEE 420 or CNE 420 |
| CEE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better; Credit is allowed for only CEE or CNE 421 |
| CEE | 423 | Structural Design | Analysis and design of reinforced concrete steel, masonry, and timber structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 421 with C or better; Pre/Co-requisite: CEE 420 (with C or better if completed) |
| CEE | 432 | Developing Software for Engineering Applications | Matrix and computer applications to structural engineering and structural mechanics. Stiffness and flexibility methods, finite elements, and differences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; Credit is allowed for only CEE 432 or 532 |
| CEE | 440 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models, and systems. Rain-runoff models. Hydrologic design. Concepts, properties, and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): CEE 341 (or MAE 340) or GLG 362 with C or better; Credit is allowed for only CEE 440 or CEE 545 or CEE 598 (Hydrology) or GLG 471 |
| CEE | 441 | Water Resources Engineering | Applies the principles of hydraulics and hydrology to the engineering of water resources projects; design and operation of water resources systems; water quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 with C or better |
| CEE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better; Credit is allowed for only CEE 452 or CNE 452 |
| CEE | 462 | Unit Operations in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 with C or better |
| CEE | 466 | Urban Water System Design | Capacity; planning and design of water supply; domestic and storm drainage; and solid waste systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 341 and 361 with C or better |
| CEE | 467 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 361 or MIC 220 with C or better; Credit is allowed for only CEE 467 or 567 |
| CEE | 470 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: CEE 361; Credit is allowed for only CEE 470, 494 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 474 | Transportation Systems Planning | Transportation systems modeling procedures, travel characteristics analysis, traffic predictions, transportation systems management, and transit planning methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 and 384 with C or better |
| CEE | 475 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 372 with C or better; Credit is allowed for only CEE 475 or 576 |
| CEE | 481 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 321 with C or better; CEE 351 with C or better; CEE 372 with C or better. Credit is allowed for only CEE 481 or 585 |
| CEE | 483 | Highway Materials, Construction, and Quality | Properties of highway materials, including aggregates, asphalt concrete, and portland cement concrete; construction practice; material delivery, placement, and compaction; quality control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 351 and CEE 372 and CEE 353 with C or better. Credit is allowed for only CEE 483 or 583 |
| CEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | |
| CEE | 485 | Sustainable Civil and Environmental Systems Engineering | Provides working knowledge of operations research methodologies, both the traditional and more modern metaheuristic techniques, to evaluate sustainable civil engineering systems and quantitatively evaluate project alternatives involving single or multiple goals. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil Engineering BSE student; CEE 300; MAT 242 with C or better |

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| CEE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 4 | L | Prerequisites: Civil Engineering BSE student; CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student; CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486. |
| CEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-6 | L | Pre-requisite: Barrett Honors Engineering student |
| CEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | |
| CEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-7 | | |
| CEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-3 | | |
| CEE | 506 | Life Cycle Assessment for Civil Systems | Covers fundamental and advanced concepts of the life cycle assessment framework exploring products, services, activities and infrastructure systems. Examines key concepts for system boundary selection, functional unit selection, inventorying, impact assessment and interpretation stages with a focus on energy and environmental assessment. Advanced concepts include allocation of effects, problem formulation for assessing footprints versus decisions or policies, and assessment of infrastructure interdependencies and supply chains. Exposes tools and data sources and presents approaches for evaluation of sensitivity and uncertainty of results. Encourages students with broad sustainability interests to enroll and explore how life cycle assessment can aid their work by shifting their views from direct to cradle-to-grave effects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CEE 506 or CEE 598 (Lifecycle Assessment) or SOS 546 or SOS 598 (Lifecycle Assessment) |
| CEE | 507 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |
| CEE | 511 | Pavement Analysis and Design | Design of flexible and rigid pavements for highways and airports. Surface, base, and subgrade courses. Cost analysis and pavement selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate Civil Engineering student; Credit is allowed for only CEE 412 or 511 |
| CEE | 512 | Pavement Performance and Management | Pavement management systems, including data collection, evaluation, optimization, economic analysis, and computer applications for highway and airport design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |
| CEE | 513 | Pavement Evaluation, Maintenance, and Rehabilitation | Provides the necessary information for pavement engineers to evaluate, identify, and select reliable and cost-effective rehabilitation alternatives for existing Hot Mix Asphalt (HMA) and Portland Cement Concrete (PCC) pavements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 514 | Bituminous Materials and Mixture | Types of bituminous materials used in pavement mixtures. Chemical composition, physical properties, desirable aggregate characteristics, optimum asphalt contents, superpave asphalt binder, mixture design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Graduate Civil Engineering student |
| CEE | 515 | Properties of Concrete | Materials science of concrete. Cement chemistry, mechanisms of hydration, interrelationships among micro- and macro-properties of cement-based materials. Mechanical properties, failure theories, fracture mechanics of concrete materials. Cement-based composite materials and the durability aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |

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| CEE | 516 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanics; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 521 | Stress Analysis | Introduces tensors: kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 522 | Experimental Stress Analysis | Specification and analysis of stress and strain at a point, stress-strain relationships. Mechanical, optical, and electrical strain gages and circuits, digital data acquisition and analysis, closed loop mechanical testing, fracture mechanics, optical methods and photoelasticity, and introduction to nondestructive testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 526 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): graduate Engineering student; APM 505 or MAE 501 with C or better; Credit is allowed for only CEE 526 or MAE 527 |
| CEE | 527 | Advanced Concrete Structures | Ultimate strength design. Combined shear and torsion. Serviceability. Plastic analysis. Special systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 530 | Prestressed Concrete | Materials and methods of prestressing. Analysis and design for flexure, shear, and torsion. Prestress losses due to friction, creep, shrinkage, and anchorage set. Statically indeterminate structures. Design of flat slabs, bridges, and composite beams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 532 | Developing Software for Engineering Applications | Fundamentals of engineering software development and object-oriented programming. Programming in C++. Development of matrix toolbox. Introduces finite element method. Computer graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 432 or 532 |
| CEE | 533 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 536 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems, exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| CEE | 540 | Groundwater Hydrology | Physical properties of aquifers, well pumping, subsurface flow modeling, unsaturated flow, numerical methods, land subsidence, and groundwater pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 541 | Surface Water Hydrology | Hydrologic cycle and mechanisms, including precipitation, evaporation, and transpiration; hydrograph analysis; flood routing; statistical methods in hydrology and hydrologic design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 543 | Water Resources Systems | Theory and application of quantitative planning methodologies for the design and operation of water resources systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 545 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models and systems. Rain-runoff models. Hydrologic design. Concepts, properties and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 440, 545 or 598 (Hydrology) |
| CEE | 550 | Soil Behavior | Physicochemical aspects of soil behavior, stabilization of soils, and engineering properties of soils. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 551 | Advanced Geotechnical Testing | Odometer, triaxial (static and cyclic) back pressure saturated and unsaturated samples, pore pressure measurements, closed-loop computer-controlled testing, in-situ testing, and sampling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 553 | Advanced Soil Mechanics | Applies theories of elasticity and plasticity to soils, theories of consolidation, failure theories, and response to static and dynamic loading. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 554 | Shear Strength and Slope Stability | Shear strength of saturated and unsaturated soils strength-deformation relationships, time-dependent strength parameters, effects of sampling, and advanced slope stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 555 | Advanced Foundations | Deep foundations, braced excavations, anchored bulkheads, reinforced earth, and underpinning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 557 | Geoenvironmental Engineering | Environmental site assessment, solid waste management, waste containment system design, soil and groundwater remediation, soil erosion control, brownfields development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 558 | Unsaturated Soil Mechanics | Advanced unsaturated soil mechanics theory, including introduction of stress-state variables and constitutive relationships for unsaturated flow and stress-strain applications. Knowledge of CEE 351 or equivalent material is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 559 | Earthquake Engineering | Characteristics of earthquake motions, selection of design earthquakes, site response analyses, seismic slope stability, and liquefaction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |

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| CEE | 560 | Soil and Groundwater Remediation | Presents techniques for remediation of contaminated soils and groundwaters with basic engineering principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 561 | Physical-Chemical Treatment of Water and Waste | Theory and design of physical and chemical processes for the treatment of water and wastewaters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 562 | Environmental Biochemistry and Waste Treatment | Theory and design of biological waste treatment systems. Pollution and environmental assimilation of wastes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 563 | Environmental Engineering Chemistry | Analyzes water, domestic and industrial wastes, lab procedures for pollution evaluation, and the control of water and waste treatment processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 564 | Contaminant Fate and Transport | Fate and transport processes with emphasis on governing equations and parameters relevant to the migration of chemicals in the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 565 | Advanced Environmental Biotechnology | Emerging topics in environmental biotechnology and related problem-solving techniques. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); CEE 562 and 567; Credit is allowed for only CEE 565 or 598 (Advanced Environmental Biotechnology) |
| CEE | 567 | Environmental Microbiology | Overview of the microbiology of natural and human-impacted environment, microbial detection methodologies, waterborne disease outbreaks, risk assessment, and regulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Engineering CEE Graduate student; Credit is allowed for only CEE 467 or 567 |
| CEE | 568 | Unit Processing in Environmental Engineering | Design and operation of unit processes for water and wastewater treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): graduate Engineering major; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CEE | 570 | Sustainable Environmental Biotechnologies | Introduces principles of green chemistry and green engineering and their integration in the design of sustainable bioengineering and biotechnology applications that protect environmental quality and human health. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisites: Civil, Environmental and Sustainable Engineering MS, MSE or PhD student; Credit is allowed for only CEE 470, 494 (Sustainable Environmental Biotechnologies), 570 or 598 (Sustainable Environmental Biotechnologies) |
| CEE | 571 | Advanced Environmental Chemistry | Applied water quality and water treatment aquatic chemistry. Knowledge of environmental chemistry topics is necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental and Sustainable Engineering MS, MSE or PhD major |
| CEE | 572 | Life Cycle Assessment for Civil Systems | Concepts of the life cycle assessment (LCA) framework exploring products, services, activities and infrastructure systems. Examines key concepts for system boundary selection, functional unit selection, inventorying, impact assessment and interpretation stages with a focus on energy and environmental assessment. Advanced concepts include allocation of effects, problem formulation for assessing footprints versus decisions or policies, and assessment of infrastructure interdependencies and supply chains. Exposure to tools and data sources occur throughout the course; presents approaches for evaluation of sensitivity and uncertainty of results. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): graduate Civil Engineering or Construction Engineering major |
| CEE | 573 | Transportation Operations | Driver, vehicle, and roadway characteristics; traffic control devices; traffic engineering studies; and transportation system management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 576 | Highway Geometric Design | Design of visible elements of roadway, design controls, at-grade intersections, freeways, and interchanges. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Engineering CEE Graduate student; Credit is allowed for only CEE 475 or 576 |
| CEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 581 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 581 or SOS 552 |
| CEE | 582 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student; Credit is allowed for only CEE 483 or 583 |
| CEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 585 | Civil Engineering Project Management | Civil engineering project management and administration, planning and scheduling, cost estimating and bidding strategies, financial management, quality control and safety, and computer applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 3 | | Prerequisite(s): MS, MSE or PhD Civil, Environmental and Sustainable Engineering major. Credit is allowed for only CEE 481 or CEE 585 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-4 | | Pre-requisite: Engineering CEE Graduate student |
| CEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering MS or MSE student |
| CEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil, Environmental, and Sustainable Engineering Graduate student |
| CEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | OPT | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-12 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | IND | Y | Z3 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1 | | Pre-requisite: Civil Engineering PhD student |
| CEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Civil, Environmental and Sustainable Eng Program | 1-15 | | Prerequisite(s): Civil Engineering PhD student |
| CEN | 501 | Computer Systems I | Introduces digital CMOS circuit and logic design and signal processing and analysis. Design of digital CMOS logic gates, combinational and sequential logic circuits, arithmetic logic unit, register-transfer-level design; Fourier and z transforms, filters, sampling, random variables, distribution and density functions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Engineering Graduate student; Credit is allowed for only CEN 501 or 591 (Computer Systems I) |
| CEN | 502 | Computer Systems II | Covers fundamentals of computer architecture and focuses on basic principles of systems programming, operating systems, compilers and networking topics that cover the computer science to computer engineering interface. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering Graduate student; Credit is allowed for only CEN 502 or 591 (Computer Systems II) |
| CEN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |

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| CEN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CEN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CEN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHE | 100 | Introduction to Chemical Engineering | Introduces design in chemical engineering, teaming, chemical engineering profession, computer models, communication skills, quality and customer satisfaction. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 2 | | Pre-requisite: Ira A. Fulton School of Engineering and University College student |
| CHE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 211 | Introduction to Chemical Processing | Applies chemical engineering analysis and problem solving to chemical processes material and energy balance methods and skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): CHM 116 with C or better; MAT 266 or 271 with C or better |
| CHE | 231 | Introduction to Transport Phenomena I: Fluids | Transport phenomena, with emphasis on fluid systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s) with C or better: CHE 211; MAT 266 or 271; PHY 121; Corequisite(s): MAT 274 or 275; Credit is allowed for only CHE 231 or 501 |
| CHE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |

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| CHE | 334 | Introduction to Transport Phenomena II: Heat and Mass Transfer | Applies heat and mass transport principles. Design of heat exchangers and continuous contactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Chemical Engineering BSE major; CHE 231 with C or better |
| CHE | 342 | Introduction to Applied Chemical Thermodynamics | Applies conservation and accounting principles with nonideal property estimation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Biomedical Engineering BSE major with BME 200 with C or better OR Chemical Engineering BSE major with CHE 211 with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if completed |
| CHE | 352 | Chemical Engineering Lab I | Introduces engineering lab equipment, data collection, and analysis; strengthens ability to generate written reports and oral presentations; reinforces teamwork skills; strengthens and extends the understanding of earlier technical contents in the curriculum. | N | LAB | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Chemical Engineering BSE major; CHE 334 with C or better |
| CHE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | |
| CHE | 432 | Principles of Chemical Engineering Design | Multicomponent distillation, engineering economics, equipment sizing and costs, plant operation economics, and simulation and optimization techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334, 342, 442, and 433 with C or better |
| CHE | 433 | Modern Separations | Design of modern separation equipment in chemical engineering other than fractionation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better |
| CHE | 442 | Introduction to Chemical Reactor Design | Applies kinetics to chemical reactor design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CHE 334 and CHE 342 with C or better; Credit is allowed for only CHE 442 or CHE 505 |
| CHE | 451 | Chemical Engineering Laboratory II | Operation, control, and design of experimental and industrial process equipment; independent research projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 334 and 342 with C or better |
| CHE | 461 | Process Dynamic Control | Process dynamics, instrumentation, and feedback applied to automatic process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student; CEE 384 or MAE 384 with C or better; CHE 211 with C or better |
| CHE | 462 | Process Design | Applies economic principles to optimize equipment selection and design; development and design of process systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; CHE 432, 433, and 442 with C or better |
| CHE | 469 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Chemical Engineering BSE major: CHE 342, or Civil Engineering BSE major: CEE 361, or Materials Science and Engineering BSE major: MSE 330; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CHE | 475 | Biochemical Engineering | Applies chemical engineering methods, mass transfer, thermodynamics, and transport phenomena to industrial biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisite: CHE 334 and 442 |
| CHE | 476 | Bioreaction Engineering | Principles of analysis and design of reactors for processing with cells and other biologically active materials; applies reaction engineering in biotechnology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering BS or BSE student OR Graduate Engineering student |
| CHE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | |
| CHE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-7 | | Prerequisite(s): Fulton Engineering undergraduate student |
| CHE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-3 | | |
| CHE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MSE 518, EEE 518, MAE 518, MSE 475, or CHE 518 |
| CHE | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| CHE | 543 | Thermodynamics of Chemical Systems | Classical and statistical thermodynamics of nonideal physicochemical systems and processes; prediction of optimum operating conditions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| CHE | 544 | Chemical Reactor Engineering | Reaction rates, thermodynamics, and transport principles applied to the design and operation of chemical reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |

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| CHE | 561 | Advanced Process Control | Dynamic process representation, linear optimal control, optimal state reconstruction, and parameter and state estimation techniques for continuous and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 569 | Air Quality Engineering | Chemical and physical processes by which air pollutants are generated and controlled with an emphasis on urban air quality. | N | LEC | N | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; Credit is allowed for only CEE 469 or CEE 569 or CHE 469 or CHE 569 |
| CHE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): graduate Chemical Engineering student |
| CHE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): graduate CHE major |
| CHE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student |
| CHE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Pre-requisites: Chemical Engineering Master's degree student |
| CHE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Chemical Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Chemical Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| CHE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Chemical Engineering Program | 1-15 | | Pre-requisites: Chemical Engineering Doctoral student |
| CHI | 101 | First-Year Chinese I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Credit is allowed for only CHI 101 or MND 101 |
| CHI | 102 | First-Year Chinese II | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills. Standard dialect. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 101; Credit is allowed for only CHI 102 or MND 102 |

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| CHI | 110 | Intensive Chinese I | Adopts different pedagogical approaches to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, appropriate cultural information related to language use is also an important component of instruction. Trains students to be able to function successfully in Chinese culture. Students don't simply learn to "speak Chinese" or read and write characters as some form of party trick. Teaches a practical skill set that allows students to communicate and behave appropriately in Chinese culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| CHI | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre/Co-requisites: ENG 101, 105, or 107; Credit is allowed for only SLC 120 or CHI 120 |
| CHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| CHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 201 | Second-Year Chinese I | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 102; Credit is allowed for only CHI 201 or MND 201 |
| CHI | 202 | Second-Year Chinese II | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. 5 class hours. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Prerequisite(s): CHI 201; Credit is allowed for only CHI 202 or MND 202 |
| CHI | 205 | Chinese Calligraphy | Introduces styles and techniques of Chinese writing. Requires no knowledge of Chinese or Japanese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| CHI | 210 | Intensive Chinese II | Intensive 2nd-year college-level Modern Standard Chinese designed for students who are highly motivated and have successfully completed at least 1st-year college-level Modern Standard Chinese language course or equivalent. Reviews and reinforces 1st-year Chinese grammatical patterns and introduces new ones in order to further develop students' communicative competence in listening, speaking, reading and writing in modern Chinese. Introduces over 500 new characters and presents and expands an equal number of spoken vocabulary items. Students increase their vocabulary, consolidate their grammar, describe objects and express ideas more accurately and fluently. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): CHI 102 or 110 with C or better |
| CHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 301 | Third-Year Chinese I | Expansion of proficiency in listening comprehension, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 202 with C or better |
| CHI | 302 | Third-Year Chinese II | Continuation of CHI 301. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: CHI 301 with C or better |
| CHI | 307 | Introduction to Literary Chinese I | Reading in various genres of pre-20th century literature (wen-yen), with analysis of the structure of the classical writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 302, JPN 202, or KOR 202 with C or better |
| CHI | 308 | Introduction to Literary Chinese II | Continuation of CHI 307. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: CHI 307 with C or better |
| CHI | 321 | Chinese Literature | Masterworks of the tradition from the 7th century BCE through the 13th century. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| CHI | 322 | Chinese Literature | Masterpieces from the later tradition and its transition to modern times. Readings, lectures, and examinations are in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| CHI | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| CHI | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| CHI | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| CHI | 338 | The Daoist Bible: The Daode jing | At 5,000 words, the Daode Jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| CHI | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; 24 or more hours; Credit is allowed for only CHI or REL 343 |
| CHI | 345 | Chinese Film and Civilization | Screening and discussion of recent films from China, Taiwan, and Hong Kong in the context of modern Chinese civilization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHI | 348 | Pathways into Chinese Culture | Introduces some important aspects of China's cultural history and traditions. Provides an overview of Chinese history and culture and reviews major developments in science and technology. Incorporates current social and cultural topics and reviews through the lens of historical context. Classroom activities enable students to gain a better understanding of traditional Chinese culture with respect to both elite and popular culture. Conducted in Mandarin and is designed for the students who are currently enrolled in CHI 301 and CHI 401 or whose Chinese proficiency level in all four skills (speaking, listening, reading and writing) are at the intermediate mid to intermediate high level according to ACTFL guidelines. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): CHI 202 with C or better. Credit is allowed for only CHI 348 or CHI 394 (Pathways into Chinese Culture) |
| CHI | 380 | The Chinese Language | Introduces the Chinese languages from linguistic perspectives. Topics include the linguistic structure and characteristics (phonetics, phonology, morphology and syntax) of the Chinese language; linguistic history and dialects of Chinese; and its relationship with culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| CHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| CHI | 401 | Fourth-Year Chinese I | Focuses on solidifying and improving students' knowledge of modern Mandarin. Emphasizes learning strategies to increase reading and listening comprehension, as well as further strengthening oral fluency and written skills. Surveys a wide variety of original text and media materials, in both full-form and simplified characters. Conducted in Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 302 with C or better |
| CHI | 402 | Fourth-Year Chinese II | Continuation of CHI 401. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 401 with C or better |
| CHI | 407 | Chinese for Academic and Professional Purposes I | Part of the Chinese Flagship program; course has a three-fold objective: (1) to improve language proficiency in all four language skills; (2) to support other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; and (3) to develop the use of explicit language learning strategies that support professional-level literacy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 402 with C or better |
| CHI | 408 | Chinese for Academic and Professional Purposes II | Part of the Chinese Flagship Program. Improves language proficiency in all four language skills; supports other Flagship courses by introducing specific vocabulary, literary genres, key reference materials; develops the use of explicit language learning strategies that supports professional level literacy. All course work in Mandarin Chinese. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: CHI 407 with C or better |
| CHI | 430 | Readings in Chinese Religions | Readings in Chinese religious texts, including Buddhism, Daoism, local religious cults, and others. May be repeated once for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 (CHI 414) with C or better |
| CHI | 450 | Classical Prose | Readings in classical prose forms, including guwen, sanwen, pianwen, fu, and incidental writings. Course content varies with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 308 with C or better |
| CHI | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| CHI | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| CHI | 461 | Classical Vernacular Performance Literature | Readings in performance literature in colloquial Chinese. Bianwen, zhugongdiao, baojuan, zaju, chuanqi drama. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 307 with C or better |
| CHI | 462 | Readings in Traditional Xiaoshuo | Readings in the shorter and longer fiction of the late imperial period written in classical vernacular language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 470 | Modern Chinese Literature and Culture | Readings in modern Chinese literary texts, including prose, fiction, and poetry. Course content changes with instructor. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: CHI 302 with C or better |
| CHI | 482 | History of the Chinese Language | Introduces the history of the Chinese language. Graduate/advanced undergraduate-level introductory course on the historical changes of the sounds, writing system, grammar, and other aspects of the Chinese language. Topics include the historical phonology of Chinese, development of graphs (Hanzi), some topics of syntactic changes in texts, morphology, lexicography, cultural implication of language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: CHI 302; CHI 308 |
| CHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| CHI | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 509 | Methods of Research in Chinese Applied Linguistics | Offers an overview of issues in applied linguistics, specifically related to the teaching and learning of Chinese as a second language. Divided according to broad topics and may vary depending on interests and background of class participants. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed only for CHI 509 or 591 (Chinese Applied Linguistics) |
| CHI | 514 | Advanced Classical Chinese | Close readings in selected premodern texts, with focus on special grammatical features, and increased vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 520 | Teaching of Chinese as a Second Language | Theory and practice of teaching Chinese, including presentation, interaction, and evaluation, with consideration given to cultural factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 561 | Readings in Traditional Xiaoshuo | Introduces major issues, texts, and resource materials for the study of narrative forms, including short stories and longer works of fiction. Focuses on the period from 1400 to 1900. One year of university-level classical Chinese or equivalent proficiency; three years of university-level modern Chinese recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHI | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| CHI | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | |
| CHM | 101 | Introductory Chemistry | Elements of general chemistry. Adapted to the needs of students in nursing and kinesiology and those preparing for general chemistry. Recommended for General Studies credit. Cannot be used for major credit in chemical or biochemical sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| CHM | 107 | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | |
| CHM | 107 | Chemistry and Society | General chemical principles and concepts presented in context of social and technological issues, e.g., energy, pollution, global warming, and others. This lecture course may be combined with the laboratory CHM 108 for those interested in lab course credit. Cannot be used for major credit in chemical or biochemical sciences. Both CHM 107 and CHM 108 must be taken to secure SQ credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | |

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| CHM | 108 | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | |
| CHM | 108 | Chemistry and Society Laboratory | Experiments in chemical principles presented in chemistry and society lectures (CHM 107). Students must complete both CHM 107 and CHM 108 to receive an SQ (General Studies). | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre/Co-requisite: CHM 107 |
| CHM | 111 | General Chemistry Laboratory for Majors I | Laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 117 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre- or corequisite(s): CHM 117 with C or better if completed; Biochemistry, Biophysics or Chemistry major |
| CHM | 112 | General Chemistry Laboratory for Majors II | Continuation of CHM 111 laboratory course in general chemistry for chemistry and biochemistry majors intended to complement CHM 118 lecture course. Covers a diverse range of laboratory experiments appropriate to chemistry and biochemistry majors designed to reinforce chemical principles and to develop a broad range of chemical synthesis skills. Uses modern analytic and characterization techniques to study the physical and chemical properties of substances. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Prerequisite(s): CHM 111 with C or better; Biochemistry, Biophysics or Chemistry major. Pre- or corequisite(s): CHM 118 with C or better if completed |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 113 | General Chemistry I | Principles of chemistry. Adapted to the needs of students in the physical, biological, and earth sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, Mathematics Placement Test score of 50% or higher, or Pre/Corequisite(s): MAT 170, 171, 210, 251, 265 or 270 with C or better if completed |
| CHM | 114 | General Chemistry for Engineers | Chemical principles with emphasis toward engineering. Students without high school chemistry or are chemical engineering majors must enroll in the CHM 113, 116 sequence instead of CHM 114. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 101 with C or better, or Mathematics Placement Test score of 50% or higher, or Pre- or corequisite(s): MAT 170, 171, 210, 251, 265, or 270 with C or better if completed |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 116 | General Chemistry II | Continuation of CHM 113. Equilibrium theory, thermodynamics, kinetics, electrochemistry, nuclear chemistry, descriptive chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Prerequisite(s): CHM 113 or 114 or 117 with C or better |
| CHM | 117 | General Chemistry for Majors I | Lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the CHM 111 laboratory course. Covers electronic structure of atoms and molecules, intermolecular forces, bonding models, molecular geometry, physical states of matter, gas laws, and chemistry of condensed matter and modern materials. Highlights chemical reactivity, periodic trends and descriptive chemistry. Suitable for students who have completed introductory chemistry at the high school level. Both CHM 117 and CHM 111 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Prerequisite(s): Biochemistry, Biophysics, or Chemistry major; minimum Math Placement Test score of 60% and minimum Advanced Placement Test of 38% or Pre- or corequisite(s): MAT 265 or 270 with C or better if completed |
| CHM | 118 | General Chemistry for Majors II | Continuation of CHM 117 lecture course in general chemistry for chemistry and biochemistry majors and is complemented by the major's CHM 112 laboratory course. Topics include thermodynamics, properties of solutions, chemical equilibrium, aqueous chemistry, acids and bases, electrochemistry, chemical kinetics, nuclear chemistry, coordination chemistry. Both CHM 118 and CHM 112 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Prerequisite(s): Biochemistry, Biophysics, or Chemistry major; CHM 117 with C or better; MAT 270 with C or better; Pre- or corequisite(s): MAT 266 or 271 with C or better if completed |
| CHM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | Pre-requisites: Biochemistry or Chemistry major; Maximum 45 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CHM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Prerequisite(s): CHM 101, 114, 116, or 118 with C or better |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | SQ | Prerequisite(s): CHM 101, 114, 116, or 118 with C or better |
| CHM | 231 | Elementary Organic Chemistry | Surveys organic chemistry, with emphasis on the reactivity of basic functional groups. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Prerequisite(s): CHM 101, 114, 116, or 118 with C or better |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): CHM 116 or CHM 118 with C or better |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): CHM 116 or CHM 118 with C or better |
| CHM | 233 | General Organic Chemistry I | Chemistry of organic compounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): CHM 116 or CHM 118 with C or better |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 234 | General Organic Chemistry II | Continuation of CHM 233. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 233 or CHM 333 with a C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre- or corequisite(s): CHM 231 with C or better if completed |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | SQ | Pre- or corequisite(s): CHM 231 with C or better if completed |
| CHM | 235 | Elementary Organic Chemistry Laboratory | Organic chemistry experiments in synthesis, purification, analysis, and identification. Both CHM 231 and 235 must be taken to secure SQ General Studies credit. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre- or corequisite(s): CHM 231 with C or better if completed |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 237 | General Organic Chemistry Laboratory I | Microscale organic chemical experiments in separation techniques, synthesis, analysis and identification, and relative reactivity. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: CHM 233 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 238 | General Organic Chemistry Laboratory II | Continuation of CHM 237. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): CHM 237 or 337 with C or better; Pre- or corequisite(s): CHM 234 with C or better if completed; Credit is allowed for only CHM 238 or 338 |
| CHM | 240 | Mathematical Methods in Chemistry | Introduces mathematical/computational methods in chemical kinetics, thermodynamics, quantum chemistry. Mathematical-based computer lab. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Molecular Sciences | 3 | CS | Pre-requisite: CHM 116 (or 118) with C or better; Pre/Co-requisites: MAT 272 or MAT 267 with C or better if completed |
| CHM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 302 | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |
| CHM | 302 | Environmental Chemistry | Explores major environmental issues, problems, and solutions from analytical and chemistry perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 114 or 116 or 118 with C or better; CHM 231 or 233 or 333 with C or better |
| CHM | 303 | Environmental Chemistry Laboratory | Lab in environmental chemistry to complement CHM 302. First-hand experience with sampling methods, analytical techniques, and environmental lab methods. Both CHM 303 and CHM 348 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 2 | L | Pre/Co-requisites: CHM 302 with C or better if completed |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|---------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | 325 | Analytical Chemistry | Advanced principles and theory of quantitative analysis, including stoichiometry, equilibria, photometric methods, electrochemistry, separation processes, statistical data analysis, and applications to advanced topics in analytical chemistry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 116 or CHM 118 with C or better |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 326 | Advanced Analytical Chemistry Laboratory | Practical methods of quantitative analysis for chemistry majors, including titrimetric, gravimetric, and photometric analysis, and analytical separation processes, statistical data analysis, and applications to advanced topics in chemical analysis. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre- or co-requisite(s): CHM 325 with C or better if completed |
| CHM | 327 | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | 327 | Instrumental Analysis | Principles of instrumental methods in chemical analysis. Electroanalytical and optical techniques. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 325 and CHM 326 with C or better; Pre/Co-requisite: CHM 346 with C or better if completed |
| CHM | 328 | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | 328 | Instrumental Analysis Laboratory | Experiments in chemical analysis by electroanalytical and optical techniques. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 2 | | Pre/Co-requisite: CHM 327 with C or better if completed |
| CHM | 333 | Organic Chemistry for Majors I | Structures, reaction mechanisms and kinetics, and systematic syntheses of organic compounds. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 116 or 118 with C or better; Credit is allowed for only CHM 231, 233 or 333 |
| CHM | 334 | Organic Chemistry for Majors II | Continuation of CHM 333. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Biochemistry or Chemistry major; CHM 333 with C or better; Credit is allowed for only CHM 234 or 334 |
| CHM | 337 | Organic Chemistry Laboratory for Majors I | Emphasizes mechanisms, kinetics, and products of organic reactions. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre-requisites: Biochemistry or Chemistry major; Pre/Co-requisite: CHM 333 with C or better if completed; Credit is allowed for only CHM 237 or 337 |
| CHM | 338 | Organic Chemistry Laboratory for Majors II | Continuation of CHM 337. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre-requisites: Biochemistry or Chemistry major; CHM 337 with C or better; Pre/Co-requisites: CHM 334; Credit is allowed for only CHM 238 or 338 |
| CHM | 341 | Elementary Physical Chemistry | Thermodynamics, equilibrium, states of matter, solutions, and chemical kinetics. For students in premedical, biological, and educational curricula. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): CHM 114, 116, or 118 with C or better; CHM 231, 233, or 333 with C or better; MAT 251, 265, or 270 with C or better; PHY 101, 112, or 131 with C or better |
| CHM | 343 | Elementary Physical Chemistry Laboratory | Physical chemistry experiments. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Pre/Co-requisite: CHM 341 with C or better if completed; Credit is allowed for only CHM 343 or 348 and 349 |
| CHM | 345 | Physical Chemistry I | Introduces quantum chemistry with application to electronic structure and dynamics of atoms and molecules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: CHM 116 (or CHM 118); CHM 240 (OR both MAT 274 [or MAT 275] and MAT 242 [or MAT 342 or 343] OR PHY 201); MAT 267 (or MAT 272); PHY 131 (or PHY 151) |
| CHM | 346 | Physical Chemistry II | Introduces equilibrium and statistical thermodynamics. Laws of thermodynamics, equations of state, multicomponent chemical and phase equilibria, and electrochemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 345 with C or better |
| CHM | 348 | Physical Chemistry Laboratory I | Lab experiments in spectroscopy and computational chemistry. To secure L General Studies credit the following must be taken: CHM 303 & CHM 348 or CHM 348 & CHM 349 & CHM 452. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisite: CHM 345 with a C or better if completed |
| CHM | 349 | Physical Chemistry Laboratory II | Lab experiments in thermodynamics, electrochemistry, and computational chemistry. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisites: CHM 346 with C or better if completed |
| CHM | 385 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| CHM | 392 | Introduction to Research Techniques | Instrumental methods and philosophy of research by actual participation in chemical research projects. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |
| CHM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 424 | Separation Science | Basic theory and practical aspects of gas, liquid, ion-exchange, and gel-permeation chromatographies, and other important industrial and research techniques. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234, or 334, or 346, with C or better |
| CHM | 433 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234 or 334 with C or better; CHM 341 or 346 with C or better; Credit is allowed for only CHM 433 or 531 |
| CHM | 434 | Advanced Organic Chemistry II | Continuation of CHM 433. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 433 or CHM 531 with C or better |
| CHM | 435 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 or BCH 461 or CHM 460; BIO 353; CHM 234 or CHM 334. Credit is allowed for only CHM 435 or CHM 535 |
| CHM | 452 | Inorganic Chemistry Laboratory | Preparation and characterization of typical inorganic substances, emphasizing methods and techniques. CHM 348, CHM 349 and CHM 452 must be taken to secure L General Studies credit. | N | REC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | L | Pre/Co-requisite: CHM 453 with C or better if completed |
| CHM | 453 | Inorganic Chemistry | Principles and applications of inorganic chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 341 or CHM 346 with C or better |
| CHM | 460 | Biological Chemistry | Structure and function of macromolecules and their involvement in the processing of energy and information by living cells. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 234 (or 334) with C or better; CHM 346 with C or better |
| CHM | 471 | Solid-State Chemistry | Crystal chemistry, thermodynamics and electrochemistry of solids, nonstoichiometric compounds, diffusion and solid-state reactions, crystal growth, and selected topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre/Co-requisite: CHM 346 with C or better if completed; Credit is allowed for only CHM 471 or 571 |
| CHM | 480 | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| CHM | 480 | Methods of Teaching Chemistry | Organization and presentation of appropriate content of chemistry; preparation of reagents, experiments, and demonstrations; organization of stock rooms and laboratories; experience in problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | |
| CHM | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| CHM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | |
| CHM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| CHM | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better; Credit is allowed for only GLG 485 or CHM 485 |
| CHM | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Molecular Sciences | 3 | L | Prerequisite(s): CHM 302 or GLG 321 or GLG 481 with C or better; Credit is allowed for only CHM 489 or GLG 489 or GLG 490 (Field Geochemistry) |
| CHM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CHM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | |
| CHM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| CHM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| CHM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-7 | L | |
| CHM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CHM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| CHM | 501 | Current Topics in Chemistry | | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 520 | Chemical Biology | Chemical biology, broadly defined, is the application of chemical tools toward the study biological problems. The purpose of this class is to provide the foundation for translational research involving cross-disciplinary approaches to tackling significant problems in the biosciences. This one-semester class will cover topics ranging from traditional molecular biology and biochemistry to state-of-the-art techniques in genomics and proteomics. Particular emphasis will be placed on modern concepts in enzymology. The class will be taught using a combination of current literature and text-based materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate students (degree and non-degree); Credit is allowed for only BCH 520 or CHM 520 |
| CHM | 523 | Advanced Analytical Chemistry | Theoretical principles of analytical instrumentation and measurements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 524 | Separation Science | Addresses principles and applications for all areas of chemical separations. Emphasizes separations principles in microfluidics and its interface with nanotechnology and traditional electronic materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 531 | Advanced Organic Chemistry I | Reaction mechanisms, reaction kinetics, linear free energy relationships, transition state theory, molecular orbital theory, and Woodward-Hoffmann rules. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: degree- or nondegree-seeking graduate. Credit is allowed for only CHM 433 or CHM 531 |
| CHM | 532 | Advanced Organic Chemistry II | Organic mechanisms, thermodynamic and kinetic control, structure/activity relationships, isotope effects, multistep reactions, reactive intermediates, radical reactions, electron transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 535 | Medicinal Chemistry | Principles of medicinal and pharmaceutical chemistry. Drug design, synthesis, and mechanism of action. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate degree or non-degree seeking students; Credit is allowed for only CHM 435 or 535 |
| CHM | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| CHM | 541 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 541 or MSE 524 |
| CHM | 543 | Computational Chemistry | Provides basic concepts and practical experience in computational chemistry as applied to molecules and solids. Systematically covers theoretical background and applied aspects of electronic structure methods/simulation, and related visualization techniques. Provides weekly laboratory session will provide hands-on experience with state-of-the-art molecular and solid-state simulation/visualization packages, with an emphasis on their reliability, predictive capability and practical limitations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking). Pre/Co-requisite: CHM 545 |
| CHM | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| CHM | 545 | Quantum Chemistry | Wave and matrix formulation of quantum mechanics applied to the vibrational, rotational, and electronic states of polyatomic molecules. Hartree-Fock, electron correlation, and molecular orbital theory. Selection rules and introduction to group theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 546 | Molecular Spectroscopy and Group Theory | Applies quantum mechanics to the general problem of the interaction of light with molecular systems. Angular momentum and group theory. Symmetry classifications. Overview of the formalism and experimental techniques in different resonant-based spectroscopies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 549 | Advanced Topics in Physical Chemistry | Various advanced and special topics in physical chemistry. Previous topics included: supercooled liquids and the glass transition, vibrational spectroscopy of solids, phase transitions and critical phenomena. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 553 | Advanced Inorganic Chemistry | Principles of modern inorganic chemistry applied over the entire periodic system. Bonding theory, chemical reactivity, spectroscopic and magnetic properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CHM | 571 | Structure, Bonding, and Symmetry in Materials | Principles of structural and materials chemistry, emphasizing crystal chemistry. Symmetry of periodic structures (space groups), factors determining bond lengths and coordination geometries, and the role of structure in determining physical properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 471 or 571 |
| CHM | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only CHM 581 or PHS 581 |
| CHM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Molecular Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Molecular Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Molecular Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Molecular Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | College of Health Solutions | College of Health Solutions | 1-4 | | |
| CHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| CHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | |
| CHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | |

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| CHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| CIM | 105 | Introduction to the Concrete Industry | Overview of the history, career opportunities, job functions, and professional organizations in the concrete industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CIM | 106 | Fundamentals of Concrete: Properties and Testing | Examines effects of concrete-making materials on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisite: CIM 105 with C or better; Co-requisite: STP 226 |
| CIM | 205 | Concrete Construction Methods | Forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing, and curing concrete for foundations and other structural members. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 106 with C or better; CON 252 |
| CIM | 206 | Application of Concrete in Construction | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CIM 205 with C or better; CON 243 with C or better |
| CIM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 305 | Management of Concrete Products: Ordering and Delivering | Basic understanding of managing the order and delivery process common to all concrete products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better; CON 221 with C or better |
| CIM | 306 | Management of Concrete Products: Production Facilities | Detailed study of the many uses of concrete in the construction of buildings, pavements, and other facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 305 and CON 251 with C or better; CON 271 |
| CIM | 405 | Concrete Problems: Diagnosis, Prevention, and Dispute | Diagnose and prevent problems related to concrete production, testing, construction, and performance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS student; CIM 206 with C or better |
| CIM | 406 | Concrete Industry Management Capstone | Intensive study of a problem appropriate to the major and the student's career interests. Lecture, student presentations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Pre-requisites: Construction BS student; CIM 405 with C or better; COM 225 |
| CIM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CIM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CIS | 105 | Computer Applications and Information Technology | Introduces business information systems from a business intelligence perspective and the uses of application software with emphasis on database and spreadsheet packages for efficient and effective problem solving. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | |
| CIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-3 | | |
| CIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | |
| CIS | 235 | Introduction to Information Systems | Survey course introducing the competitive and strategic uses of information systems, how information systems are transforming organizations and their management, and the issues, difficulties, and opportunities facing the technology professional and business manager today. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: CIS 105, 200 or 220 with C or better; MAT 210, 270, 211 or 271 with C or better; Credit allowed for only CIS 235 or CIS 236 |
| CIS | 236 | Honors Introduction to Information Systems | Introduces strategic leveraging of IS solutions and surveys different facets of IS in order to gain an understanding of how business problems are addressed and opportunities realized. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | CS | Prerequisite(s): Barrett Honors student |
| CIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Accountancy or Computer Information Systems BS or PRE student |
| CIS | 300 | Web Design and Development | Focuses on Web site development, including target audience, image presentation, page/content topic organization, site navigational functionality, implementation needs, and future needs. Web site design and development practice using business software products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: Minimum 2.0 ASU cumulative GPA AND minimum 56 earned hours, OR be post-bacc undergraduate, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| CIS | 308 | Advanced Excel in Business | Covers advanced Excel skills using an applied focus on different types of decisions one may analyze using spreadsheet capabilities; graphs and charts to communicate complex analytics; pivot tables to slice and dice data for reporting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or CIS 236 with C or better; minimum 45 hours. credit is allowed for only CIS 308 or CIS 394 (Advanced Excel in Business) |
| CIS | 309 | Business Process Management | Flow charting, swimlane diagramming, process simulation using modern tool suites. Teaches the types of process evaluation decision analytics most commonly used and covers applied process analysis in a variety of contexts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. credit is allowed for only CIS 309 or CIS 394 (Process Management) |
| CIS | 311 | Business Project Management | Overview of project management emphasizing the fundamentals and analytics that can support project decision making. Covers project planning, resource and disruption management and problem resolution skills. Leverages widely available project management computer tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 311 or CIS 394 (Project Management - Information Systems) |

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| CIS | 315 | Introduction to Business Data Analytics | Overview of analytics in the business context; concepts of strategic and operational analytics; overview of concepts like dimensional modeling, the Model Lifecycle, data mining, big data, KPIs and metrics, ERP and analytics, in-database/memory analytics; real-time analytics and data stream analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) with C or better: CIS 235 (or CIS 236); ECN 221; MAT 211; BS Business Data Analytics major |
| CIS | 340 | Business Information System Development I | Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to plan and analyze the needs of modern business information system development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey CIS BS student; ACC 241, 242 or 271 with C or better; CIS 235 or 236 with C or better; ECN 221 with C or better; MAT 211 with C or better. |
| CIS | 345 | Business Information System Development II | Provides a clear understanding of the Systems Development Life Cycle (SDLC) tools, techniques, and methodologies used to design, implement, and support modern business information systems development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Computer Information Systems BS student; CIS 340 with C or better |
| CIS | 355 | Business Data Warehouses and Dimensional Modeling | SQL, stored procedures and data warehouse architectures; data warehouse requirements definition, design and analysis; overview of the steps in building information-enabled business models; role of data warehousing in data mining and analytics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): BS Business Data Analytics major. Corequisite(s): CIS 315 |
| CIS | 360 | Business Database Concepts | Database theory, design, and application, including the entity-relationship model; the relational, hierarchical, and network database models; and query languages. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Accountancy BS student and CIS 105 or 236; ACC 231, 232 or 261; ACC 241, 242 or 271 with C or better |
| CIS | 365 | Business Database Systems Development | Focuses on business database and data warehousing systems, development and management. Topics include capturing business requirements using data modeling, SQL, data security, operational and analytical data stores and data integrity. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): Computer Information Systems BS major; CIS 235 or 236 with C or better |
| CIS | 375 | Business Data Mining | Building predictive analytics (e.g., SEMMA, KDD); exposure to logistic regression, machine learning and decision tree methods; Understanding lift factors, ROC curves; hands-on use of mining software; business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: Minimum 2.0 ASU cum GPA and minimum 56 earned hours, OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| CIS | 405 | Business Intelligence | Business intelligence (BI) is a term describing a broad category of applications, technologies, architectures and processes for gathering, storing, accessing and analyzing data to provide business users with timely information to enable better insights into project and process management and evidence-based decision making. BI is based on techniques for data decision capture, cleansing, validation, warehousing and analytics to help decision makers improve decision outcomes. Provides a capstone understanding of the concepts of managing data resources and the development of business intelligence capabilities using data visualization, data warehousing, data mining, online analytical processing decision support systems and other advanced BI topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) CIS 105 or 236 with C or better; minimum 45 hours. Credit is allowed for only CIS 394 (Business Intelligence) or 405 |
| CIS | 415 | Big Data Analytics and Visualization in Business | Text and stream mining, visualizations for big data, Hadoop, cloud-based solutions, fundamentals of big data programming, social media and big data, NoSQL, software tool support for visualizations; GIS, business case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): CIS 315 with C or better; BS Business Data Analytics major |
| CIS | 425 | Electronic Commerce Strategy | Key business strategies and technology elements of contemporary electronic commerce. Covers Web design and interactions between Web pages and databases. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Accountancy BS or Computer Information Systems BS student; CIS 360 or 365 with C or better |
| CIS | 430 | Networks and Distributed Systems | Advanced topics such as communications protocols, distributed systems, network security and client-server systems; applications based on platforms such as .NET and networked UNIX. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisites: W. P. Carey Computer Information Systems student; ACC 330 or 444; CIS 340 or 410 with C or better; Pre/Co-requisite: CIS 360 or 365 |
| CIS | 440 | Systems Design and Electronic Commerce | Systems design for organizational and electronic commerce systems; use of project management and systems analysis and design tools. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | L | Pre-requisites: W.P. Carey Computer Information Systems BS student; CIS 360 or 365 with C or better; CIS 430 with C or better |
| CIS | 450 | Enterprise Analytics | Model lifecycle analysis, analytics governance, aligning governance, aligning firm and analytics strategy, big data security issues, enterprise search, applied projects. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s) with C or better: CIS 355, 375, 415; BS Business Data Analytics major |
| CIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey CIS BS student |
| CIS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |
| CIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisites: W.P. Carey ACC BS or CIS BS student |
| CIS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-6 | | Prerequisite(s): Barrett Honors student |

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| CIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-7 | L | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-3 | | Pre-requisites: W.P. Carey CIS BS student |
| CIS | 502 | Information Systems | Organizational, strategic, and technical issues of the management of information. Evaluation, design, and use information systems as competitive advantage. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: W.P. Carey MBA student |
| CIS | 505 | Introduction to Enterprise Analytics | Ensuring the foundational understanding of contextualized analytics within the business enterprise continuum by covering how data flows and is managed across the landscape of enterprise business processes. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate student |
| CIS | 506 | Information Management | Addresses central issues in managing information to achieve competitive advantage and support innovation. Specific topics covered include data quality, data modeling using both entity relationship models and star schemas, data governance, document management, document search, enterprise performance management and visualization techniques. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Prerequisite(s): graduate W. P. Carey major |
| CIS | 508 | Data Mining I | Charting a roadmap for data-driven decision making and getting a practical understanding of how IT tools and techniques can allow managers to extract predictive analytics and patterns from primarily numeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate student |
| CIS | 509 | Data Mining II | Uses tools and techniques to analyze unstructured data that are applied to business problems to support informed decision making and the extraction of predictive analytics and patterns from primarily nonnumeric data. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-req for CIS 509 |
| CIS | 510 | Business Process and Workflow Analysis | Builds foundations for process analysis by focusing on information, documents, people, roles and business rules. Provides an introduction to various techniques and tools of process analysis, including an understanding of organizational issues in rolling out change initiatives. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major. Credit is allowed for only CIS 510 or CIS 591 (Business Process Workflow Analysis) |
| CIS | 512 | Business Intelligence | Understanding how organizations make use of Business Intelligence (BI) to gain a sustainable competitive advantage. Builds the foundations for evidence-based managerial decision making. Covers technologies for data warehousing and data mining from a managerial perspective. Covers contemporary topics such as real-time BI, business analytics, and business performance management with the help of case studies, audio-video content, guest speakers, online forums to generate creative thinking and discussion. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Prerequisite(s): W.P. Carey graduate major |
| CIS | 515 | Business Analytics Strategy | Evaluating, strategically aligning, planning for and directing investments in and governance of processes for continuous renewal of analytics deployments in business. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Pre-requisite: W.P. Carey graduate major |
| CIS | 525 | Strategic Value of Information Technology | Instills balanced and disciplined view of IT and business with their interplay. Assigns cases and assignments involving the symbiotic relationship of IT and business to provide real-world exposure for critical thinking and engaging discussion. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 525 or CIS 591 (Strategic Value of Information Technology) |
| CIS | 540 | Enterprise Information Security and Controls | Provides a broad survey of information security and controls, utilizing the COBIT framework to illustrate how information security and controls contribute to effective IT governance. Develops an understanding of the issues associated with information security and effective IT governance, with particular emphasis on how management contributes to the effectiveness of an organization's information security program. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major. Credit is allowed for only CIS 540 or CIS 591 (Information Security & Controls) |
| CIS | 545 | Managing Enterprise Systems | Investigates major categories of enterprise systems, factors driving software adoption and keys for successful implementation. Pays special attention to evaluating the potential impact of emerging technologies on business environments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 545 or CIS 591 (Enterprise Systems) |
| CIS | 560 | IT Services and Project Management | Provides an overview of the project management process groups and knowledge areas (defined by the PMBOK) and focuses on the application of key concepts, tools and techniques for delivering on-time, on-budget IT project and services that meet end-user needs. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 560 or CIS 591 (IT Services and Project Management) |

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| CIS | 575 | Emerging Technologies | Explores decision models and frameworks applied to assess, evaluate and implement emerging technologies. Explains the principles of sustaining and disruptive technological innovation on the adoption and diffusion of emerging technologies. Discusses the technical, industrial and legal parameters that enable convergence and commoditization of technologies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Information Systems | 3 | | Prerequisite(s): W.P. Carey graduate major; Credit is allowed for only CIS 575 or CIS 591 (Emerging Technologies in IT) |
| CIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-4 | | Pre-requisite: Specific W.P. Carey Graduate student |
| CIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-12 | | Pre-requisite: W.P. Carey Info Systems PhD student |
| CIS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CIS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Information Systems | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CIS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Information Systems | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CMN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 502 | Theory and Practice in Communication and Persuasion | Theoretical exploration of communicative and persuasive practices as applied in various contexts. Surveys classical, modern, and contemporary theories of persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 505 | Methods in Applied Communication Research | Examines the intellectual, practical, and ethical dimensions of engaging in applied research. Emphasizes empirical and quantitative methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 506 | Humanistic Inquiry and Field Research in Communication | Examines interpretive, critical, and rhetorical approaches to communication and advocacy, including hermeneutics, ethnography, and cultural studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 515 | Ethical Issues in Communication Advocacy | Examines the ethical issues or concerns related to communication advocacy. Variable topics; examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 516 | Mediation and Dispute Resolution | Examines advocacy's role in fair negotiation and effective and successful dispute resolution. Examines research, theory, and/or practice. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 520 | Communication Campaigns | Explores public communication strategies aimed at advocating for general or specific audiences and/or for particular issues and causes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 522 | Argumentation and Advocacy | Introduces various models of argumentation and their applications to various spheres of advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts students |
| CMN | 531 | Communication and Social Change | Examines human communication and technologies of communication as agents of social change within groups, communities, organizations, and/or cultures. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 532 | Advocacy in Interpersonal Settings | Examines particular relational contexts in which advocacy plays a pronounced role (e.g., personal, family, and service provider relationships). | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 550 | Advocacy in Organizational Settings | Examines issues of upward influence, the expression of dissent, and grievance systems within organizational contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 551 | Democracy and Power in Organizations | Examines structural, historical, relational, and symbolic dimensions of organizational communication and discourses that foster or impede communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Communication Studies Master of Arts student; CMN 502 or COM 502 with C or better |
| CMN | 557 | Communication and Technology | Assesses technology's role in the social dynamics of human interaction. Emphasizes the impact of technology with regard to communication advocacy. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 565 | Globalization and Advocacy | Explores the forces leading to increased intergroup contact and their impact on social, economic, and political dynamics. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 570 | Communication and Advocacy in Social Context | Variable topics course exploring the intersection of communication and advocacy in specific contexts not addressed in other elective courses. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |

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| CMN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisite: Communication Studies Master of Arts student |
| CMN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CMN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-6 | | Pre-requisite: Communication Studies Master of Arts student |
| CNE | 210 | Engineering Mechanics I: Statics | Force systems, resultants, equilibrium, distributed forces, area moments, fluid statics, internal forces, friction, and stability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: FSE 100 with C or better; MAT 266 (or MAT 271) with C or better; PHY 121 with C or better; PHY 122 with C or better; Credit is allowed for only CEE or CNE 210 |
| CNE | 212 | Engineering Mechanics II: Dynamics | Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) and MAT 275 (or MAT 274) completed with C or better; Credit is allowed for only CEE or CNE 212 |
| CNE | 213 | Introduction to Deformable Solids | Strain-displacement and stress-strain-temperature relations. Stresses and deformations due to axial, shear, torsional and bending moments. Buckling, stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: CEE 210 (or CNE 210) with C or better; MAT 274 (or MAT 275) with C or better; Credit is allowed for only CEE or CNE 213 |
| CNE | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CNE | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes Horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |
| CNE | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Credit is allowed for only CNE 271 or CON 271 |
| CNE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CNE | 321 | Structural Analysis and Design | Statically determinate and indeterminate structures (trusses, beams, and frames) by classical and matrix methods. Introduces structural design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering BSE major; CEE 212 or CNE 212 or MAE 212; CEE 213 or CNE 213 with C or better; Credit is allowed for only CEE 321 or CNE 321 |
| CNE | 351 | Geotechnical Engineering | Index properties and engineering characteristics of soils. Compaction, permeability and seepage, compressibility and settlement, and shear strength. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 351 |
| CNE | 353 | Civil Engineering Materials | Structure and behavior of civil engineering materials, including steel, aggregate, concrete, masonry, asphalt, wood, composites. Atomic structure and engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): CEE 213 (or CNE 213) with C or better; BSE Civil Engineering or Construction Engineering major; Credit is allowed for only CEE or CNE 353 |
| CNE | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction Management BS major; CON 243 and CON 252 OR Construction Engineering BSE major; CNE 243 or CON 243; Credit is allowed for only CNE 383 or CON 383 |
| CNE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 400 | Earth Systems Engr & Mgmt | Introduces earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | (L or HU) & H | Prerequisites: BSE Civil Engineering major; CEE 300 with C or better OR Non-CEE Juniors or Seniors; Credit is allowed for only CEE or CNE 400 |
| CNE | 420 | Steel Structures | Behavior of structural components and systems. Design of steel members and connections. Load and resistance factor design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321, or CNE 321 with C or better. Credit is allowed for only CEE 420 or CNE 420 |
| CNE | 421 | Concrete Structures | Behavior of concrete structures and the design of reinforced and prestressed concrete members, including footings. Partial design of concrete building system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BSE Civil Engineering or Construction Engineering major; CEE 321 or CNE 321 with C or better; Credit is allowed for only CEE or CNE 421 |
| CNE | 450 | Geotechnical Applications for Construction | Soil formation, engineering properties and use as building materials. Soil's influence on construction of built environment, including specifications and biological aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS major; CON 223 with C or better; CON 310; Credit is allowed for only CNE 450 or CON 450 |

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| CNE | 452 | Foundations | Applies soil mechanics to foundation and retaining wall systems, including bearing capacity, settlement, and lateral earth pressure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Civil Engineering BSE or Construction Engineering major; CEE 351 or CNE 351 with C or better; Credit is allowed for only CEE 452 or CNE 452 |
| CNE | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 271 or CNE 271 with C or better; CON 383 or CNE 383; Pre-or Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CNE | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 453 or CON 453; Pre- or corequisite(s): CNE 495 or CON 495; Credit is allowed for only CNE 455 or CON 455 |
| CNE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction Management BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CNE | 486 | Integrated Civil Engineering Design | Requires completion of a civil engineering design in a simulated practicing engineering environment. Limited to undergraduates in their final semester. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | L | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 383 or CNE 383; CEE 321; CEE 341; CEE 351; CEE 361; CEE 372 with C or better OR Construction Engineering student: CEE or CNE 321; CEE or CNE 351 with C or better. Credit is allowed for only CEE or CNE 486 |
| CNE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CNE | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction Management BS major or Construction Engineering BSE major; CON 383 or CNE 383; Credit is allowed for only CON 495 or CNE 495 |
| CNE | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CNE 453 or CON 453; Credit is allowed for only CNE 496 or CON 496 |
| COE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only COE 501 or ECD 503 or PPE 501 or SPE 501 or TEL 501 |
| COE | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| COE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| COE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 100 | Introduction to Human Communication | Topics-oriented introduction to basic theories, dimensions, and concepts of human communicative interaction and behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| COM | 110 | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 110 | Elements of Interpersonal Communication | Demonstration and practice of communicative techniques in establishing and maintaining interpersonal relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 124 | Media and Culture | Introduces contemporary intercultural issues as expressed through various media in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | C | |
| COM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Maximum 24 earned hours |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 207 | Introduction to Communication Inquiry | Bases of inquiry into human communication, including introduction to notions of theory, philosophy, problems, and approaches to the study of communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 with C or better; Minimum 2.50 GPA |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 222 | Argumentation | Philosophical and theoretical foundations of argumentation, including a comparison of models of advocacy and evidence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisite: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 225 | Public Speaking | Verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: ENG 101, 105 or 107 with C or better |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | |
| COM | 230 | Small Group Communication | Principles and processes of small group communication, attitudes, and skills for effective participation and leadership in small groups, small group problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |

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| COM | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| COM | 241 | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | 241 | Introduction to Oral Interpretation | Communication of literary materials through the mode of performance. Verbal and nonverbal behavior, interface of interpreter with literature and audience, and rhetorical and dramatic analysis of literary modes. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L or HU | Pre-requisites: Minimum 2.25 GPA; ENG 101, 105 or 107 with C or better |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 250 | Introduction to Organizational Communication | Introduces the study of communication in organizations, including identification of variables, roles, and patterns influencing communication in organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.25 GPA |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): non-Communication student; minimum 25 hours |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): non-Communication student; minimum 25 hours |
| COM | 259 | Communication in Business and the Professions | Interpersonal, group, and public communication in business and professional organizations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 25 hours |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 263 | Elements of Intercultural Communication | Basic concepts, principles, and skills for improving communication among persons from different minority, racial, ethnic, and cultural backgrounds. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisite: Minimum 2.25 GPA |
| COM | 281 | Communication Activities | Nongraded participation in forensics or interpretation occurricular activities. Maximum 3 semester hours each semester. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | |
| COM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | |
| COM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| COM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 300 | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |
| COM | 300 | Communication in Interdisciplinary Studies | Examines and analyzes communication in the context of other academic disciplines. Open to BIS majors only. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: BIS student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 100 and COM 225 with C or better or COM 259 with C or better |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 308 | Advanced Research Methods in Communication | Advanced communication research methods, including quantitative, qualitative, and critical approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 207 with C or better; MAT 117 or an MA general studies course with C or better; Minimum 2.50 GPA |
| COM | 309 | Rhetorical, Interpretive, and Critical Methods in Communication | Examines humanistic and qualitative approaches to communication. Introduces textual, interactional and ethnographic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better; Minimum GPA of 2.0 |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 310 | Relational Communication | Explores communication issues in the development of personal relationships. Current topics concerning communication in friendship, romantic, and work relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |

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| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 312 | Communication, Conflict, and Negotiation | Theories and strategies of communication relevant to the management of conflicts and the conduct of negotiations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100 with C or better; Minimum GPA of 2.50 |
| COM | 314 | Inner-City Families: The Cycle of Poverty | Examines issues and concerns that confront inner-city families. Blends theory and application. From a theoretical perspective, examines issues that affect families who live in the inner city (e.g., race and poverty), as well as specific skills and programmatic elements that are needed to work with families in an urban setting. In terms of application, provides an intensive service-learning-based experience. Engages students in specific service to an embedded inner-city organization for a minimum of 3 hours per week. Students work with the professor to determine appropriate service placements. | N | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 OR Junior standing; Credit is allowed for only COM 314 or 498 (Inner City Family) |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 316 | Gender and Communication | Introduces gender-related communication. Examines verbal, nonverbal, and paralinguistic differences and similarities within social, psychological, and historic perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 317 | Nonverbal Communication | Study of communication using space, time, movement, facial expression, touch, appearance, smell, environment, objects, voice, and gender/cultural variables. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 2.50 GPA; Minimum 45 hours; Credit is allowed for only COM 317 or CMN 475 |
| COM | 319 | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | 319 | Persuasion and Social Influence | Variables that influence and modify attitudes and behaviors of message senders and receivers, including analysis of theories, research, and current problems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 207 with C or better; Minimum 2.50 GPA; Credit is allowed for only CMN 329 or COM 319 |
| COM | 320 | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 320 | Communication and Consumerism | Critical evaluation of messages designed for public consumption. Perceiving, evaluating, and responding to political, social, and commercial communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 321 | Rhetorical Theory and Research | Historical development of rhetorical theory and research in communication, from classical antiquity to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or HU) & H | Prerequisite(s): minimum 2.50 GPA; COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Prerequisite(s): COM 100 with C or better; ENG 101, 105, 107 or 111 with C or better; Minimum 2.50 GPA |
| COM | 323 | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 323 | Communication Approaches to Popular Culture | Critical analysis of popular culture within social and political contexts; emphasizes multicultural influences and representations in everyday life. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | C | Pre-requisites: Minimum 2.50 GPA; COM 100 with C or better |
| COM | 324 | Rhetoric and Media Criticism | Critical examination of media arts, including cinema, television, and video. Applies rhetorical, textual, and interpretive methods of criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 325 | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |
| COM | 325 | Advanced Public Speaking | Social and pragmatic aspects of public speaking as a communicative system; strategies of rhetorical theory and the presentation of forms of public communication. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: COM 225 or COM 259 with C or better; Minimum 2.50 GPA |

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| COM | 326 | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| COM | 326 | Court Room Oratory | Increases knowledge and appreciation of the role of communication in the development of legal and public policies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | |
| COM | 327 | Civil Communication | Offers a theoretical understanding of civil communication and methods for applying civil communication practices in a variety of contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA; junior standing |
| COM | 341 | Social Contexts for Performance | Adaptation and performance of literature for the community outside the university. Research into the practical uses of performed literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 342 | Oral History and Storytelling | Examines the formation of culture and history through research, presentations, the collection of oral history, and the telling of stories. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: ENG 101 or 102; Credit is allowed for only CMN 394 (Storytelling and Oral History), COM 342 or 394 (Storytelling and Oral History) |
| COM | 353 | Professional Communication | Introduces both verbal and written professional communication styles and technologies in preparation for communication-related internships and careers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 371 | Language, Culture, and Communication | Cultural influences of language on communication, including social functions of language, bilingualism, biculturalism, and bidialectism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C & G | Pre-requisites: Minimum 2.50 GPA; COM 263 with C or better |
| COM | 377 | Communication, Terrorism, and National Security | Surveys strategic communication and its relationship to terrorism challenges facing the United States and the rest of the world. Begins with a look at language and definitions, how strategic communication functions are traditionally conceptualized, and the scope and extent of the terrorism problem. Focuses on the contemporary problems of terrorism, including its extent, tactics, and strategies and strategies that aim to combat it. Concludes with a look at new frontiers in the terrorism struggle, including new media and communication approaches. | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: minimum 2.50; minimum Junior standing; Credit is allowed for only COM 377 or 394 (Communication: Terrorism and National Security) |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 382 | Classroom Apprenticeship | Nongraded credit for students extending their experience with a content area by assisting with classroom supervision in other COM courses. | N | PRA | N | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Pre-requisites: Minimum 2.50 GPA; Credit is allowed for only CMN 382 or COM 382 |
| COM | 383 | Communication and Mentoring | Explores the role of communication in face-to-face and online mentoring relationships with an emphasis on message shaping, nonverbal communication, professionalism and audience analysis. Applies practice and theory from a variety of lower-division communication courses (public speaking, professional and business, small group, intercultural and interpersonal) to prepare students for mentoring roles in the Communication Assessment Learning Lab (CALL) on ASU's west campus. During the semester, students (individually and as a member of a group) are engaged in creating and delivering both online and in-person public speaking tutorials. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 100 (or COM 110 or 230 or 259 or 263) with B or better; COM 225 with B or better; Credit is allowed for only COM 383 or 498 (Call Lab Mentorship) |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 400 | Communication in Professions | Specialized study of communication processes in professional and organizational settings. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU & C | Prerequisites: Interdisciplinary Studies or Business Communication student; Minimum Sophomore standing; Minimum 2.00 GPA; COM 259 (or COM 100 and COM 225) with C or better |
| COM | 404 | Research Apprenticeship | Direct research experience on faculty projects. Student/faculty match based on interests. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| COM | 407 | Advanced Critical Methods in Communication | Examines critical approaches relevant to communication, including textuality, social theory, cultural studies, and ethnography. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 407 or 507 |
| COM | 408 | Quantitative Research Methods in Communication | Advanced designs, measurement techniques, and methods of data analysis of communication research. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better; Credit is allowed for only COM 408 or 508 |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 410 | Interpersonal Communication Theory and Research | Survey and analysis of major research topics, paradigms, and theories dealing with message exchanges between and among social peers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 411 | Communication in the Family | Broad overview of communication issues found in marriage and family life, focusing on current topics concerning communication in the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 2.50 GPA; COM 207 with C or better; Credit is allowed for only COM 411 or CMN 598 (Communication in the Family) |
| COM | 414 | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 414 | Crisis Communication | Role of communication in crisis development and intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 416 | Gender, Race, Colonialism, and Media | Explores how the mass media constructs gender and race and perpetuates colonial views of minorities and varied nationalities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 417 | Communication and Aging | Critical study of changes in human communicative patterns through the later adult years, with attention on intergenerational relationships and self-concept functions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.0 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 421 | Rhetoric of Social Issues | Critical rhetorical study of significant speakers and speeches on social issues of the past and present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Pre-requisites: COM 308 or COM 309 with C or better; COM 321 or 323 with C or better; Minimum 2.50 GPA |
| COM | 422 | Advanced Argumentation | Advanced study of argumentation theories and research as applied to public forums including: political, business, and legal contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Pre-requisites: Minimum Junior standing; Minimum 2.00 GPA; ENG 101, 105, 107 or 111 with C or better |
| COM | 424 | Television Studies and Criticism | Surveys critical and historical approaches to television as a medium; to television research; and to television's effects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better or Junior standing with minimum 3.00 GPA |
| COM | 426 | Political Communication | Theories and criticism of political communication; including campaigns, mass persuasion, propaganda, and speeches. Emphasizes rhetorical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisite: Minimum 2.50 GPA |
| COM | 429 | Semiotics and Visual Communication | Semiotic analysis of mediated forms of communication, including film, television, and photography. Includes the political and aesthetic dimensions of images. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better OR Junior standing with minimum 3.00 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 430 | Leadership in Group Communication | Theory and process of leadership in group communication, emphasizing philosophical foundations, contemporary research, and applications to group situations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 441 | Performance Studies | Theory, practice, and criticism of texts in performance. Emphasizes the interaction among performer, text, audience, and context. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 and COM 308 with C or better |
| COM | 442 | Identity, Performance, and Human Communication | Explores communication dimensions of self and others as performance. Examines topics that include gender, race, sexuality, age, and ethnicity through performance. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: COM 225 (or COM 241); Minimum 2.50 GPA |
| COM | 445 | Narrative Performance | Theory and practice of performing narrative texts (e.g., prose fiction, oral histories, diaries, essays, letters). Includes scripting, directing, and the rhetorical analysis of storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | HU | Pre-requisites: Minimum 2.50 GPA; COM 241 with C or better |

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| COM | 446 | Performance of Literature Written by Women | Explores, through performance and critical writing, literature written by women. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | (L or HU) & C | Pre-requisite: Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 450 | Theory and Research in Organizational Communication | Critical review and analysis of the dominant theories of organizational communication and their corollary research strategies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: COM 308 or COM 309 with C or better; Minimum 2.50 GPA |
| COM | 451 | Communication and Work Relationships | Communication principles and practices associated with supervisory, peer, and client relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 100; Minimum 45 completed hours; Minimum 2.50 GPA |
| COM | 452 | Communication and the Art of Happiness | Examines how communication behaviors relate to constructing happiness and wellbeing. Topics include gratitude, forgiveness, social support, appreciation, social networks and communicative contagion of mood intersecting with issues of dyadic, group and organizational communication. Auxiliary readings come from a variety of disciplines, including psychology, management, sociology, positive organizational scholarship and appreciative inquiry. Course activities include reading, field exercises, journal writing, exams, project presentation(s) and paper(s). | N | LEC | N | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: 2.50 GPA; Junior standing; Credit is allowed for only COM 452 or 494 (Communication of Happiness) |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 453 | Communication Training and Development | Examines the procedures and types of communication training and development in business, industry, and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 454 | Rhetorical and Critical Approaches to Public Relations | An historical and contemporary account of how public relations messages build corporate identities and persuade audiences by shaping public values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: COM 207 with C or better OR Junior standing with minimum 3.00 GPA; Credit is allowed for only COM 454 or CMN 598 (Rhetorical&Critical Approaches to Public Relations) |
| COM | 456 | Political Communication Campaigns | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 456 | Political Communication Campaigns | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate and image creation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 457 | New Media | Explores how new communication and information technologies affect communication and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 207 with C or better OR Junior standing with minimum 3.00 GPA |
| COM | 459 | Theory and Methods of Social Media Networks | A network-based perspective plays an increasingly important role in our understanding of contemporary communication process of which much has shifted from a hierarchical, densely bounded group basis to a personalized, lateral network. Especially, along with the popularity of social media, social networking has become a key term that characterizes our everyday life. Discusses the role of new media technologies in evolving networked society, and how online networks are intertwined with our offline life. Covers theories and computerized methods that help understand online network structure. Includes lectures and discussions on theoretical issues with hands-on exercises of analytic methods. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): junior standing; minimum 2.50 GPA; MAT 142 or higher with C or better; Credit is allowed for only COM 459 or COM 494 (Social Networks) |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |
| COM | 463 | Intercultural Communication Theory and Research | Survey and analysis of major theories and research dealing with communication between people of different cultural backgrounds, primarily in international settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 2.50 GPA; COM 308 with C or better |

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| COM | 464 | Communicative Sexualities | Grounded in the discipline of communication, provides an introduction to the qualitative research practice of semiotic phenomenology. Examines sexuality as a personal, social, historical, and cultural phenomenon, wherein communication is studied as the mediating force through which meanings are ascribed to sexuality and sexual experience. Sexuality is studied as it manifests among a wide variety of people, practices, and contexts. U.S. American culture provides the primary cultural context. Addresses basic questions including: How do we understand sexuality? How have we come to know what we know about sexuality? How do we understand the relationship between sexuality as personal desire, and sexuality as social norm in specific cultural contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Junior or Senior standing; Minimum 2.50 GPA; Credit is allowed for only COM 464 or 494 (Communicative Sexualities) |
| COM | 465 | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 465 | Intercultural Communication Workshop | Experientially based study of communication between members of different cultures designed to help students improve their intercultural communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 471 | Global Media and Cultural Identity | Explores theory and practices of global media production, dissemination and consumption. Surveys the ways in which local, regional and global sociocultural and political forces interplay to shape cultural identities and media consumption. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Prerequisite(s): minimum 2.50 GPA; junior standing |
| COM | 477 | Sport, Culture, and Discourses | Introduces sport as a global economic and cultural force, and as a foundational discourse experienced largely through media. Facilitates the understanding of sport as a major cultural and socializing institution and, thus, as a key site for the construction of knowledge, understandings, ideologies, and identities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 2.50 GPA |
| COM | 483 | Advanced Communication and Mentoring | Students serve as peer mentors in the Communication Assessment Learning Lab (CALL) with instructional emphasis on speaker apprehension, listening, the dynamics of group communication and leadership. Through experiential learning, mentors employ ethical peer tutoring practices by coaching undergraduates in managing public speaking apprehension, speech development and organization. Further, mentors provide on-the-spot feedback to undergraduates relating to delivery techniques, style, nonverbal communication, persuasive strategies and the use of presentational material. | N | LEL | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: COM 383 with C or better |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): Communication major; minimum 56 hours; minimum 2.50 GPA; COM 225 with C or better; COM 308 with C or better |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): Communication major; minimum 56 hours; minimum 2.50 GPA; COM 225 with C or better; COM 308 with C or better |
| COM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Pre-requisites: Communication major or Public Relations and Strategic Communication minor student; Minimum 56 hours; Minimum 2.80 GPA; COM 225 (CMN 225) with C or better; COM 308 or 309 with C or better |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Pre-requisite: Minimum 2.50 GPA |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| COM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-6 | | Prerequisite(s): Barrett Honors student |
| COM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-7 | | |
| COM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| COM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Pre-requisite: Minimum 2.50 GPA |
| COM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 507 | Qualitative Research Methods in Communication | Qualitative research methods, including interviewing, field methods, and other nonquantitative techniques for analyzing communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite: Communications Graduate student; Credit is allowed for only COM 407 or 507 |
| COM | 508 | Quantitative Research Methods in Communication | Empirical research designs, measurements, and statistical strategies and techniques in analyzing and evaluating experimental and descriptive research in communication. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisites: Communications Graduate student. Credit is allowed for only COM 408 or COM 508 |
| COM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| COM | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 604 | Theory Construction in Communication | Review and analysis of philosophical problems inherent in communicative research and of metatheories designed to deal with these problems. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 607 | Contemporary Rhetorical Methods | Analysis of issues in the practice of rhetorical communication research, including criticism and scholarship. | N | SEM | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 608 | Multivariate Statistical Analysis of Data in Communication | Statistical analysis of communication research data. Multivariate procedures used in communication research and methods of causal analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 609 | Advanced Qualitative Research Methods in Communication | Analysis of issues in the practice of qualitative communication research, including data gathering, fieldwork issues, analysis strategies, and reporting results. | N | LEC | N | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 3 | | Pre-requisite: Communications PhD student |
| COM | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications PhD student |
| COM | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisite: Communications Graduate student |
| COM | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Pre-requisites: Communications PhD student; COM 600 or COM 608 with B or better; COM 601 or COM 700 with B or better |
| COM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| COM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | Hugh Downs School of Human Communication | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 100 | Introduction to Construction | Introduces construction industry sectors and professionals. Additional content includes developing personal competencies required of construction professionals. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 101 | Construction and Culture: a Built Environment | Analyzes the cultural context of construction, emphasizing its centrality in the evolution and expansion of built environments as expressions of ethical and historical value systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | HU & H & G | |
| CON | 106 | Introduction to Concrete Materials for the Built Environment | Effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Discusses concrete mixture proportioning along with the calculations and statistical analysis of strength testing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | SQ | |
| CON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |

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| CON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 221 | Applied Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): MAT 170 or higher with C or better; PHY 111 with C or better; PHY 113 with C or better |
| CON | 223 | Strength of Materials | Analyzes strength and rigidity of structural members in resisting applied forces. Stress, strain, shear, moment, deflections, combined stresses, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | Prerequisite(s): CON 221 with C or better |
| CON | 241 | Surveying | Theory and fieldwork in construction and land surveys. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better; Credit is allowed for only CEE 281, CNE 241 or CON 241 |
| CON | 243 | Heavy Construction Equipment, Methods and Materials | Emphasizes Horizontal construction. Fleet operations, maintenance programs, methods, and procedures to construct tunnels, roads, dams, and the excavation of buildings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Credit is allowed for only CON 243 or CNE 243 |
| CON | 244 | Working Drawing Analysis | Provides the ability to read and understand architectural plans; to understand drawing symbols, dimensions, abbreviations, and terms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 2 | | |
| CON | 251 | Microcomputer Applications for Construction | Applies the microcomputer as a problem-solving tool for the constructor. Uses spreadsheets, information management, and multimedia software. | N | LAB | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): MAT 170 or higher with C or better |
| CON | 252 | Building Construction Methods, Materials, and Equipment | Emphasizes Vertical construction. Methods, materials, codes, and equipment used in building construction corresponding to the division of the CSI Master Format. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 271 | Construction Safety | Safety procedures and equipment. OSHA requirements for construction. Biological aspects of construction safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Credit is allowed for only CNE 271 or CON 271 |
| CON | 273 | Electrical Construction Fundamentals and Project Management | Electrical construction, design, estimating, scheduling and project management. Electrical safety, blueprints and symbols, theory, sequence of installation. National Electrical Code (NEC). | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | |
| CON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 296 | Field Internship | Participation as interns on construction projects to observe and experience the daily activities. | N | PRA | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 271 or CNE 271; Credit is allowed for only CON 296 or CNE 296 |
| CON | 310 | Testing of Materials for Construction | Structural and behavioral characteristics, engineering properties, measurements, and application of construction materials. Not open to engineering students. | N | LEL | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction Management BS major; CON 221 with C or better; CON 223 with C or better |
| CON | 345 | Mechanical Systems | Design parameters and equipment related to heating and cooling systems for mechanical construction. Biorelated aspects of mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS major; CON 221 with C or better; CON 252 with C or better; PHY 111 or 121 with C or better; PHY 113 or 122 with C or better |
| CON | 377 | Residential Construction Production Procedures | Process used in residential construction. How a house is built: design, permits, scheduling, codes, contracting, site management, mechanical/electrical. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: Construction BS or Design BSD student; CON 221 with C or better; CON 252 |
| CON | 383 | Construction Estimating | Analyzes construction drawings and specifications. Utilizes advanced technical and ethical practices in estimating process. Quantity surveying techniques for CSI divisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 4 | | Prerequisite(s): Construction Management BS major; CON 243 and CON 252 OR Construction Engineering BSE major; CNE 243 or CON 243; Credit is allowed for only CNE 383 or CON 383 |
| CON | 384 | Environmental Aspects of Heavy Construction | Methods, measures and analysis related to control of erosion, dust generation and storm water discharge during projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major. Pre- or corequisite(s): CON 243. Credit is allowed for only CON 384 or CON 394 (Environmental Aspects of Heavy Construction) |
| CON | 389 | Construction Cost Accounting and Control | Nature of construction cost. Depreciation and tax theory and variable equipment costs. Cash flow theory, investment models, profitability, and analysis. Computer applications. Funding sources and arrangements. Builder's insurance. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Pre-requisite: Engineering and Design BS or BSD student; CON 221 with C or better; CON 251, or Construction Engineering student |
| CON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Pre-requisite: Engineering BS or BSE student |
| CON | 424 | Structural Design | Economic use of concrete, steel, and wood in building and engineered structures. Design of beams, columns, concrete formwork, and connections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS major; CON 223 with C or better; Pre- or corequisite(s): CON 310 |
| CON | 430 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only CON 430 or CON 494 (Facilities Management/Operations & Maintenance) or CON 530 or CON 598 (Facilities Management/Operations & Maintenance) |
| CON | 446 | Marketing for Construction | Provides key marketing practices to include strategic planning, marketing collateral, networking, business development, and interview preparation for project pursuits. Covers all aspects of service-based marketing topics and practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): COM 225; CON 221 with C or better |
| CON | 448 | Sustainable Construction | Studies the principles associated with sustainable construction: problem definition, definition of sustainability, measures of sustainability, examination of current industry practices, financial and resource impacts of sustainable construction, independent student investigation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS or Civil (Sustainable Engineering) student; Senior standing; Credit is allowed for only CON 448, CON 494 or CON 598 (Sustainability in Construction) |

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| CON | 450 | Geotechnical Applications for Construction | Soil formation, engineering properties and use as building materials. Soil's influence on construction of built environment, including specifications and biological aspects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS major; CON 223 with C or better; CON 310; Credit is allowed for only CNE 450 or CON 450 |
| CON | 453 | Construction Project Management I | Building information modeling, including current computer programs and LEED methodologies for advanced project deliveries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 271 or CNE 271 with C or better; CON 383 or CNE 383; Pre-or Corequisite(s): CON 495 or CNE 495; Credit is allowed for only CON 453 or CNE 453 |
| CON | 454 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods and materials required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CNE 243 or CON 243; Credit is allowed for only CON 454 or CON 494 (Trenchless Construction Mth) or CON 554 |
| CON | 455 | Construction Project Management II | Advanced topics in administrative procedures, planning processes, and coordination required to successfully complete construction projects on time and budget. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CON 453 or CON 453; Pre- or corequisite(s): CNE 495 or CON 495; Credit is allowed for only CNE 455 or CON 455 |
| CON | 457 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: BS Construction Management or BSE Construction Engineering major; Pre/Co-requisite(s): CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 465 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing and efficient practices. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 465 or CON 565 |
| CON | 467 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): junior or senior standing; Credit is allowed for only CON 467 or CON 567 or CON 494 (Advanced Procurement Systems) |
| CON | 471 | Mechanical and Electrical Project Management | Specialty contracts and agreements, scheduling, material handling, labor unit analysis, and job costing for mechanical and electrical construction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite: Construction BS student; CON 453 with C or better |
| CON | 472 | Development Feasibility Reports | Integrates economic location theory, development cost data, market research data, and financial analysis into a feasibility report. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Pre-requisite: Construction BS or Design BSD student; REA 380 |
| CON | 477 | Residential Construction Business Practices | Topics addressed include development, marketing, financing, legal issues, and sales. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering BS or Design BSD student; MKT 382 or MKT 395 with D or better OR CON 446 with C or better; CON 377 with C or better; CON 389 with C or better |
| CON | 483 | Advanced Building Estimating | Concepts of pricing and markup, development of historic costs, life cycle costing, change order and conceptual estimating. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction BS student; CON 383 with C or better |
| CON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): Construction Management BS major with CON 296 or CNE 296 OR Construction Engineering BSE major with CON 271 or CNE 271; Credit is allowed for only CON 484 or CNE 484 |
| CON | 486 | Heavy Construction Estimating | Methods analysis and cost estimation for construction of highways, bridges, tunnels, dams, and other engineering works. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction BS major and CON 383 with C or better, or Construction Engineering BSE major |
| CON | 487 | Heavy Construction Project Management | Studies methods used to manage large magnitude heavy construction projects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): BS Construction Management major; CON 243 (or CNE 243) with C or better; Credit is allowed for only CON 487 or 494 (Heavy Const Proj Mgmt) |
| CON | 488 | Heavy Construction Earthworks | Geotechnical issues with respect to foundation grading, forming and location for various types of infrastructure and transportation projects. Also includes streets, highway and embankment developments, retaining wall system, mechanically stabilized earth walls, and required quality control methods for these activities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; Pre- or corequisite(s): CON 243; Credit is allowed for only CON 488 or CON 494 (Heavy Construction Earthworks) |
| CON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | | Prerequisite(s): Barrett Honors student |
| CON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | |
| CON | 495 | Construction Planning and Scheduling | Various network methods of project scheduling, such as AOA, AON Pert, bar-charting, line-of-balance, and VPM techniques. Microcomputers used for scheduling, resource allocation, and time/cost analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | CS | Prerequisite(s): Construction Management BS major or Construction Engineering BSE major; CON 383 or CNE 383; Credit is allowed for only CON 495 or CNE 495 |
| CON | 496 | Construction Contract Administration | Surveys administrative procedures of general and subcontractors. Studies documentation, claims, arbitration, litigation, bonding, insurance, and indemnification. Discusses ethical practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | L | Prerequisite(s): Construction Management BS or Construction Engineering BSE major; CNE 453 or CON 453; Credit is allowed for only CNE 496 or CON 496 |
| CON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-7 | | |

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| CON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-3 | | |
| CON | 501 | Construction Research Methods | Data collection methodologies, applied parametric and nonparametric statistics, data analysis techniques, technical writing, and data presentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 530 | Facilities Operations and Maintenance | Operations, maintenance and energy management requirements of various types of facilities and built environments. Ethical practices | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CON 430, 494 (Facilities Management/Operations & Maintenance), 530 or 598 (Facilities Management/Operations & Maintenance) |
| CON | 531 | Facility Management: Building Energy Management | Understand and learn energy management techniques in facilities management. Identifying and performing efficiency evaluations on various types of heating, ventilation and air conditioning systems in typical buildings. Concepts and methods of managing, adjusting and balancing equipment and systems for maximum facility performance. Facilities organizations best practices to maximize energy savings and performance, such as insulation usage, lighting optimization, energy management systems and commissioning procedures. Identification of ancillary benefits to energy-efficient building systems such as indoor air quality, sustainability and energy audits. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CON 531 or CON 598 (Facility Management Building) |
| CON | 532 | Facilities Project Management | Understand and learn project management techniques in facilities management. Stakeholder analysis, including roles, responsibilities and risk considerations. Asset owner and manager considerations within project components and deliverables. Development of project scope, requirements, schedules, budgets and communication plans from a facility manager's perspective. Best practices of facilities organizations for managing contract types, contract governance and performance management. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CON 532 or CON 598 (Facility Project Management) |
| CON | 540 | Construction Productivity | Productivity concepts. Data collection. Analysis of productivity data and factors affecting productivity. Means for improving production and study of productivity improvement programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction MS or Construction Engineering MSE major |
| CON | 545 | Construction Project Management | Theory and practice of construction project management. Roles of designer, owner, general contractor, and construction manager. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): Construction or Construction Engineering graduate student |
| CON | 551 | Alternative Project Delivery Methods | Design/construction interaction; conceptual estimation and scheduling; the RFQ/RFP process; legal, insurance, risk allocation issues; procurement and selection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 554 | Trenchless Construction Methods | Theory and practice of trenchless construction methods. Types of equipment, roles of site personnel, engineering design, contractual issues, and safety. Lecture, class projects, and site visits. Knowledge of heavy construction equipment, methods, and materials required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Construction Graduate student |
| CON | 557 | Principles of Leadership for Project Managers | Individual, organizational and process/structure leadership in project setting. Four-step leadership transformational model for project leaders. Project leadership tools and applications to motivation, conflict management, team building and delegation of risk. | N | LEC | N | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisites: MS or PhD Construction Management or MSE Construction Engineering major. Pre/Corequisites: CON 243; Credit is allowed for only CON 457, 494 (Prin Lead & Management), 557 or 598 (Prin Lead and Mgmt) |
| CON | 561 | International Construction | Investigation of the cultural, social, economic, political, and management issues related to construction in foreign countries and remote regions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering Graduate student |
| CON | 565 | Deductive Logic, Leadership and Industry Structure | Simple, logical explanations of construction and other industries. State-of-the-art supply chain, profit maximizing, and efficient practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only CON 465 or CON 565 |
| CON | 567 | Advanced Procurement Systems | Development of multicriteria decision procurement model for selecting the performing contractor. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CON 467, 567 or 494 (Advanced Procurement Systems) |
| CON | 570 | Introduction to Advanced Technology Facilities | Introduces advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. The constructor's viewpoint, including: planning, structures, mechanical, and tool installation. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 571 | Construction of Advanced Technology Facilities | Construction issues for advanced technology facilities such as cleanrooms, data centers, research labs, and hospitals. Issues include scheduling, cost estimating, project management, mechanical, safety, commissioning and tool hookup. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: CON 570 with C or better |

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| CON | 575 | Information Technology in Construction | Uses virtual construction methodologies to improve the construction enterprise using communications, facility modeling, and decision making. Site visits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 589 | Construction Company Financial Control | Financial accounting and cost control at the company level in construction companies. Accounting systems. Construction project profit calculations. Financial analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 3 | | Pre-requisite: Engineering MS, MSE or PHD student |
| CON | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-4 | | Prerequisite(s): Construction graduate student |
| CON | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Pre-requisite: Construction Masters student |
| CON | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 700 | Research Methods | Course on research methods in a specific discipline. | N | RSC | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | Y | GNA | Ira A. Fulton Engineering | Del E. Webb Construction | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |
| CON | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Ira A. Fulton Engineering | Del E. Webb Construction | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CON | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Del E. Webb Construction | 1-15 | | Pre-requisite: Construction Doctoral student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CPI | 101 | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CPI | 101 | Introduction to Informatics | Concepts, tools, techniques, and applications of informatics. Includes overview of programming, data management, visualization, modeling, and social implications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 111 | Game Development I | Introduces video game design, art theory, and concepts as they apply to video game development. Basic art principles used in game development. Covers the fundamental video game art principles of 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. Also includes game design, game production, asset production, and game programming. Hands-on experience by creating 2-D game prototypes belonging to different video game genres and evaluating the techniques. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | CS | |
| CPI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 200 | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |
| CPI | 200 | Mathematical Foundations of Informatics | Practical introduction to the mathematics necessary for studies in informatics. Topics include discrete math, analytic geometry, calculus, and linear algebra. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | MA | Prerequisite(s) with C or better: MAT 242 (or MAT 342 or 343); 243 |
| CPI | 211 | Game Development II | Introduces the basics of 3D game development by using a game engine. Focuses on the pipeline of 3D game development including environment and contents creation, scripting to control components, and graphics user interfaces development. Develops several 3D games for multi platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 111 with C or better |
| CPI | 220 | Applied Data Structures and Algorithms | Thorough grounding in applied knowledge and skills related to algorithms and data structures used in the development of software designed to solve complex problems. Overview of computational and critical thinking skills that can be called upon to analyze and solve complex problems in multiple domains. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CSE 205 with C or better |
| CPI | 221 | Advanced Object-Oriented Principles Using Java | Advanced object-oriented programming using the Java language. Design concepts and problem solving. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CPI 220 with C or better |
| CPI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 310 | Web-Based Information Management Systems | Relational database design, entity-relationship modeling, relational algebra, SQL, database access through Web, Web data management, introduction to XML, fundamentals of Web application development, Web server architectures, lecture, in-class lab activities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 311 | Game Engine Development | State-of-the-art techniques for computer game design and programming with an emphasis on 3-D graphics and interaction. Focuses on a practical, example-driven approach to learning the unique art of 3-D game development. Topics include graphics game engines, textures, shader programming, artificial intelligence, physics, modeling, sound effects, and techniques for user interfaces. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 321 | Fundamentals of Game Art | Introduces art theory and concepts as they apply to video game development. Covers 2-D and 3-D composition, color theory, modeling, and lighting techniques. Demonstrates practical application of these art fundamentals in establishing style guides, concept art, storyboards, and in-game assets. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 211 with C or better |
| CPI | 350 | Evaluation of Informatics Systems | Methods for evaluation of informatics systems, including design of computational and human experiments, ethnography, and analytic techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s) with C or better: GCU 495 (or IEE 380 or STP 226 or 231 or 420); BS Informatics major |
| CPI | 360 | Decision Making and Problem Solving | Practical use of database systems, computer graphics, and modeling to inform decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better |
| CPI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 400 | Scientific Computing and Visualization | Introduces scientific computing and visualization, supported by data acquisition, geometric modeling, and computer graphics. Covers the necessary mathematical foundations, data structures, and algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 101 with C or better; CPI 200 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| CPI | 411 | Graphics for Games | Examines real-time rendering of high-quality interactive graphics. Studies advances in graphics hardware and algorithms that make this possible. Examples of techniques and topics include nonphotorealistic rendering, occlusion culling, level of detail, terrain rendering, shadow generation, image-based rendering, and physical simulation. Helps students add graphics-related features to the game architecture developed in CPI 311. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |
| CPI | 412 | Cognitive Systems and Intelligent Agents | Advanced concepts and techniques of rule-based programming and agent architectures, incorporating ideas from artificial intelligence, cognitive psychology, and linguistics, along with their use in creating intelligent synthetic characters for interactive games and other virtual environments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 311 with C or better |
| CPI | 421 | 3-D Modeling and Texturing | Provides working knowledge of 3-D modeling, texture mapping, and paint concepts for the creation of 3-D video games art assets. Students work on concepts such as 3-D lighting, high polygon mesh rendering, and various third-party software and how to integrate them into the asset production pipeline. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): CPI 211 with C or better |
| CPI | 422 | 3-D Animation and Rigging for Video Games | 3-D rigging, skinning, and 3-D animation techniques for video game development. Includes rotoscoping for character animation, animation loops, and integration of motion capture data, as well as prop animation. Covers operation of 3-D cameras and 3-D rendering. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CPI 321 with C or better |
| CPI | 441 | Gaming Capstone | Industry-oriented course emphasizing the video game development process, technical skills, teamwork and communication among the students enrolled in the gaming certificate. Students partner with local industry involved in game development, visual art, and educational gaming and solve real-world problems by working in a team comprised of students from the three tracks available within the certificate. | N | LEL | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Prerequisite(s): BS Informatics or BIS (Computer Gaming) or Computer Gaming certificate; senior standing |
| CPI | 460 | Intelligent Interactive Instructional Systems | Intelligent interactive instructional systems serve as tutors, as learning companions or both. Covers their design, the technology that powers them, the learning theories that motivate them and results from experimental evaluations. Emphasizes intelligent tutoring systems, as they are a more mature technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | | Pre-requisite: CSE 205 with C or better; Credit is allowed for only CPI 460 or CSE 494 (Intelligent Instr Sys) |
| CPI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-12 | | |
| CPI | 485 | Informatics Capstone I | Team-based design of an informatics system; working with clients; development of requirements, use cases, class/object diagrams, and plans for quality assurance and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 3 | L | Pre-requisite: CPI 310, 350 and CSE 463 with C or better; Informatics BS student |
| CPI | 486 | Informatics Capstone II | Implementation of the informatics system designed during CPI 485; work processes; keeping designs consistent with implementations; conducting QA and other evaluations; technical communication; teamwork. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 4 | L | Pre-requisite: Informatics BS student; CPI 485 with C or better |
| CPI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CPI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CPI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | |
| CPI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computing and Informatics Program | 1-3 | | |
| CPI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computing and Informatics Program | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |

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| CPP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-4 | | |
| CPP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-7 | | |
| CPP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-3 | | |
| CPP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | |
| CPP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | College of Public Service and Community Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 623 | Counseling At-Risk Youth | Examines the behaviors that place adolescents at risk for not achieving career goals and interventions to address these behaviors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 644 | Psychology of Careers | Advanced career counseling, including theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 |
| CPY | 645 | Professional Issues and Ethics | Ethical, legal, and professional issues of concern to practitioners and researchers functioning in a variety of settings. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 650 | Counseling Latinos | Survey course addressing mental health concerns and perspectives for individuals and families of Latino, Spanish-speaking origin. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 522 |
| CPY | 651 | Personality Assessment | Training in the use of major objective personality instruments to assess psychological symptoms; emphasizes MMPI-2 and MCMI-III. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: CED 523 |
| CPY | 660 | Prevention and Consultation | Community focus with emphasis on outreach, prevention, psychoeducation, consulting, and advocacy from a systematic multicultural perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Counseling MC or MED student OR Counseling Psychology PhD student |
| CPY | 668 | Grant Writing and Grant Makers: The Washington Context | Develops successful proposals for educational research projects. Students gain experience writing for federal agencies, reviewing, and being evaluated on grant proposals. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CPY or HED 668 |
| CPY | 670 | Individual Differences | Focuses on definitions and assessment of ways humans vary on psychological constructs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 671 | Multicultural Counseling | Provides awareness of the influence of sociocultural variables on human development and explores implications for counseling minority populations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 674 | Counseling Women | Explores women's development and its implications for counseling. Sexism in mental health, sex differences in diagnosis and psychopathology, and women's particular treatment needs. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 675 | Health and Wellness Counseling | Theory, research, and practice in health and wellness counseling. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CED 577 with C or better |
| CPY | 676 | Social Bases of Behavior | In-depth examination of contemporary research and theory in selected areas of social psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 677 | Advanced Counseling | Advanced topics in counseling theory, research, and practice. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate; CED 577 with C or better |
| CPY | 678 | Supervision Theory | Models of therapist development and clinical supervision. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CPY | 679 | History and Systems of Psychology | Examines the development and differentiation of the discipline of psychology from its origins in philosophy to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 694 | Substance Abuse: Therapy and Psychoeducation | Develops knowledge and skills for conducting psychotherapeutic and educational interventions to address substance use disorders and associated concerns. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CPY | 701 | Science and Practice of Counseling Psychology | Directed experiences involving the integration of theory, research, and practice in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 702 | Research Methods in Counseling Psychology | Applies experimental and/or quasi-experimental methods to theory construction and treatment evaluation in counseling psychology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: COE 502 |
| CPY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CPY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post-Baccalaureate Undergraduate |
| CRD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| CRD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |

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| CRD | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| CRD | 235 | Leadership and Ethics | Examines ethical questions faced by emerging leaders. Focuses on helping students develop emotional intelligence, current professional issues, and the refinement of a professional philosophy and comprehensive set of competences that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CRD 235 or NLM 235 |
| CRD | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| CRD | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102 with a C or better; MAT 142 or higher with a C or better; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| CRD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: CRD, NLM, PRM or TDM 210 with C or better; CRD, NLM, PRM or TDM 301 with C or better; senior standing; 2.50 GPA; Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| CRD | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| CRD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| CRD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 502 | Statistical and Data Analysis | Introduces descriptive and inferential methods used in community development, with an emphasis on nonprofit, tourism, and recreation sciences. Students gain experience using statistical software. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 530 | Community Services Management | Examines and applies organizational behavior, leadership, human resources, development, planning, and risk management to profession. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 552 | Critical Issues | Examines critical research issues in the leisure, recreation and tourism fields. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 555 | Theoretical Perspectives in Community Development | Reviews theoretical and empirical literature in community development with an emphasis on nonprofit, tourism, and recreation sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 569 | Advanced Tourism and Recreation Studies | Advanced study of tourism with an emphasis on relevant practices, theories, and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 570 | Social Aspects of Outdoor Recreation Management | Analyzes the social aspects of natural resource science, policy, and management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| CRD | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| CRD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |

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| CRD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |
| CRD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CRD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 610 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. Considers issues at different scales, ranging from urban to rural, local to global, historical to contemporary. Critically examines the role of public, private, and nonprofit institutions in promoting quality of life. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 620 | Community Research Methods | Introduces community research methods, with emphasis on methodological questions and techniques relevant to contemporary community-based research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 640 | Research Seminar in Community Resources and Development I | A seminar designed to explore issues related to advancing a career as a researcher in the fields associated with community resources and development (i.e., non]profit, recreation and parks, tourism). Critical to this study is an understanding of the conduct of high quality research, an understanding of issues that arise in professional settings (e.g., expediency vs. effectiveness), and ethical principles and processes that undergird research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |
| CRD | 650 | Research Seminar II | Helps prepare doctoral students to become productive and successful social scientists in community resources and development. Covers a wide range of topics under the broader conceptual umbrella of research, teaching, and service. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Doctoral student in Community Resources and Development |
| CRD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| CRD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | |

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| CRD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 100 | Introduction to Criminal Justice | Overview of the justice system. Roles of law enforcement personnel, the courts, and correctional agencies. Philosophical and theoretical views in historical perspective. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 201 | Criminal Justice Crime Control Policies and Practices | Introduces concepts as the application of situational crime prevention strategies, problem-oriented crime control approaches, hot spots policing, defensible space, and crime prevention through environmental design. Students work to apply academic theory to actual crime problems in the local area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Credit is allowed for only CRJ 201 or 294 (Criminal Justice Crime Control) |
| CRJ | 203 | Courts and Sentencing | History and development of courts, trial by jury, and other dispute resolution mechanisms; selection and removal of judges and juries; organization, structure, and jurisdiction of courts; trial and nontrial processes of the judiciary. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 204 | Juvenile Justice | History and development of the juvenile court and the juvenile justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 225 | Introduction to Criminology | Provides a broad survey of criminal behavior and the major attempts to explain it. Topics include definitions and measurement of crime, theories of crime causation, and crime types. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Credit is allowed for only CRJ 225 or 294 (Introduction to Criminology) |
| CRJ | 230 | Introduction to Policing | Introduces policing in the United States covering the history of police, contemporary police work, and problems in policing. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 240 | Introduction to Corrections | Introduces the structure and function of the corrections system from historical and contemporary perspectives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 260 | Substantive Criminal Law | Criminal liability. Crimes against persons, property, and society. Governmental sanctions of individual conduct as formulated by legislatures and the courts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | |
| CRJ | 270 | Community Relations in the Justice System | Focuses on developing an informed plan and policy for incorporating research findings about the surrounding community within various justice services and agencies. Topics include social stratification, minority groups, and victimology. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | |
| CRJ | 284 | Professional Growth in Criminal Justice | Engages students in targeted field practice. Activities include: identifying and touring at two criminal justice agencies, conducting one professional interview, observing one court procedure, participating in small group discussions and exercises, enhancing interpersonal skills, video reviews, listening to professional guest speakers employed in the field, exploring and incorporating research tools, maintaining journal entries, developing one professional resume, and building opportunities to network professionally. | N | LEC | N | YGB | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 |
| CRJ | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 302 | Research Methods | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Also stresses methods for conducting research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L | Pre-requisite: MAT 117, 119, 142 (114), 170, 210, or 270 with C or better; CRJ 100 with C or better; CRJ 201 with C or better |
| CRJ | 303 | Statistical Analysis | Fundamentals and application of descriptive and inferential statistics, with emphasis in the administration of justice area. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | CS | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; MAT 117, 119, 142, 170, 210 or 270 with C or better |
| CRJ | 305 | Gender, Crime, and Criminal Justice | Studies women as offenders, victims, and professionals in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 306 | Race, Ethnicity, Crime, and Criminal Justice | Studies minority issues in the criminal justice system. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | C | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 308 | Advanced Criminological Theory | Focuses on the definition, measurement, causes, consequences, and control of crime. Explores fundamental debates in criminological thought through original readings in the field. Emphasizes critical assessment of dominant criminological theories. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 with C or better; CRJ 201 with C or better; CRJ 225 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 308 or 394 (Advanced Criminological Theory) |
| CRJ | 315 | Police Organization and Management | Provides a thorough understanding of the structure, processes, and behavior of police organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100, CRJ 301, JUS 100, JUS 105 or JUS 305 with a C or better; CRJ 230 (AJS 230) with C or better |

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| CRJ | 321 | Imperatives of Proof | Problems and means of establishing identity and fact in relation to arrest, detention, adjudication, sentencing, and correctional case management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 350 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | SB | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | |
| CRJ | 403 | Victims and the Criminal Justice System | Examines criminal victimization in the United States. Topics may include: victimization theories, the nature and extent of victimization, the impact of crime on victims and society, the interactions between victims and the criminal justice system, and victim rights and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 403, 494 (Victimology) or 494 (Victims and the Criminal Justice System) |
| CRJ | 404 | Juvenile Delinquency | Examines the nature of delinquency related to causes, correlations and current strategies being used to reduce its occurrence. Topics may include: policies and programs, juvenile hate crime, social reaction and labeling theories, learning problems and delinquency, gangs, drugs, and capital punishment for juveniles. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 404 or 494 (Juvenile Delinquency) |
| CRJ | 405 | Neighborhoods and Crime | Draws from the ecology of crime perspective as well as urban sociology to study variation in crime across neighborhoods with emphasis on how social institutions and public policy can influence community crime patterns. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 405 or 494 (Neighborhoods and Crime) |
| CRJ | 406 | Sex Crimes | This course examines the prevalence, nature, and etiology of sex crimes. Crimes examined include sex-related homicide, sexual assault, intrafamilial sexual abuse, sex trafficking, and prostitution. The course also provides a comprehensive overview of the response of the criminal justice system to victims and perpetrators of sex crimes, with a focus on the investigation of sex crime and the prosecution and punishment of sex offenders. Other issues that will be covered are the history and impact of the rape law reform movement, rape trauma syndrome, sex offender treatment strategies, and the history and impact of sex offender notification and registration laws. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing. Credit is allowed for only CRJ 406 or 494 (Sex Offenders and Sex Crimes) |
| CRJ | 408 | Drugs and Crime | Address the problems, practices, programs, and policies associated with drugs, crime, and drug policy. Primarily focuses on the nature, patterns, and trends of drug use, the relationships between drug use and crime, and criminal justice policy targeted at drug use. Also focuses on discussing various research findings and the controversies surrounding the relationship between drugs and crime. Teaches students about theories of drug use and crime, the basic elements of drugs, and the history of drug control and contemporary drug policies. Pays specific attention to the war on drugs and how the role of race was and is intertwined with drugs and crime. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 409 | Police Accountability | Using historical, theoretical and practical approaches, explores major issues in police accountability and community policing including command and control systems, managing police culture, accountability to the community, and training. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 100 and 201 with C or better (or BAS Appl Sci maj or BIS Criminlogy and Crim Justice emph or Criminlogy and Crim Justice min with CRJ 201 with C or better); Jr, Sr or Postbacc standing. Credit for only CRJ 409 or 494 (Police Acctabty) |
| CRJ | 410 | Procedural Criminal Law | The criminal process. Constitutional and legal problems associated with arrest, search and seizure, and due process of law. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 412 | International Terrorism | Provides a systematic examination of the structural, organizational and political characteristics that affect the topic of international terrorism. Also examines the legal ramifications of the Patriot Act and its legal implications upon our judicial system. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and 201 with C or better; Junior or Senior standing; Credit is allowed for only CRJ 412, 494 (Homeland Security) or 494 (International Terrorism) |
| CRJ | 413 | Forensics | Provides an overview of forensic science as it is practiced in a modern crime laboratory. Examines how the principles of chemistry, biology, physics and other scientific disciplines are applied to the analysis of physical evidence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 413 or 494 (Forensics) |
| CRJ | 417 | Cyber Terrorism | Focuses on the specific avenues of terrorism that are perpetuated in the digital world of the 21st century. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 and 201 with a C or better and Junior or Senior Standing |
| CRJ | 419 | Domestic Terrorism | Develops a foundation and understanding of how domestic terrorism has evolved in the United States of America. Introduces the history of significant events, current events, actors and organizations, and how the future of domestic security issues affects the internal and external politics of the USA. Also examines the problems that have been faced, created, and how other actors react to the United States approach to protect itself and combat Domestic Terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 419 or 494 (Domestic Terrorism) |

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| CRJ | 422 | Violence in America | Provides undergraduate students with an understanding of violence in American society. Explores the meanings and measure of violence, as well as theoretical and historical context. Examines multiple dimensions of violence, including domestic, gang-related, terrorism, homicide, hate crimes, school violence and sexual assault. Explores, in addition to theoretical discussion, patterns, prevention, policy and practical implications. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Postbaccalaureate standing; Credit is allowed for only CRJ 422 or 494 (Violence in America) |
| CRJ | 443 | Community Corrections | Examines the probation and parole functions as well as the numerous and diverse types of community corrections programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 450 | Crime Analysis | Techniques of crime analysis and crime mapping and how they are practiced in everyday policing. Focuses on issues in crime analysis and crime mapping, critiquing current practices, and reviewing some of the technology that is used. Covers topics such as: introduction to crime analysis and crime mapping; environmental criminology; data and technology; and specific techniques and examples used in tactical, strategic and administrative crime analysis. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): CRJ 201 with C or better; junior standing |
| CRJ | 461 | Domestic Violence | Legal, historical, theoretical, and treatment aspects of domestic violence, including child abuse, woman battering, incest, and marital rape. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |
| CRJ | 462 | Gangs | Critical examination of the history and development of gangs, including criminal justice system responses to gangs and gang-related behaviors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Junior, Senior or Post-Baccalaureate standing |
| CRJ | 463 | White Collar Crime | Overview of major issues in business, professional, and official rule violations. Includes consumer fraud, securities violations, unethical professionalism, and political corruption. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 464 | Organized Crime | The nature of organized crime and its illegal activities, theories of containment, and efforts by justice agencies to counter its dominance in society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 470 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | L or SB | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; ENG 101, 105 or 107 with C or better; Junior or Senior standing |
| CRJ | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): CRJ 201 with C or better, CRJ 284 with Y grade if completed |
| CRJ | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | | Pre-requisite: Barrett Honors student; CRJ 100, CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-6 | L | Pre-requisite: Barrett Honors student; CRJ 201 with C or better |
| CRJ | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Pre-requisite: CRJ 201 with C or better; Minimum Junior standing |
| CRJ | 495 | Student Assessment | Students may attend a mid-semester information session on the assessment process. At the end of the semester, students take part in a standardized examination and self-administered survey. Y/E grade only. Students must register for this class their final semester. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 0 | | Pre-requisite: CRJ 100 and CRJ 201 with C or better. Junior or Senior standing |
| CRJ | 496 | Directed Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to contribute to a specific project such as a report or publication. Tasks may include data collection and coding, data analysis, literature reviews and producing research reports. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the faculty member with whom the student will work and the director of the school offering the course. | N | RSC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-3 | | Prerequisite(s): CRJ 302 with C or better; junior or senior standing |
| CRJ | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-3 | | Pre-requisites: CRJ 100 with C or better; CRJ 201 with C or better; Junior or Senior standing |
| CRJ | 501 | Seminar in Criminal Justice | Overview of the American criminal justice system, with emphasis on policy issues in police, courts, sentencing, corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |

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| CRJ | 502 | Seminar in Criminology | Theory and research on the nature, causes, and prediction of criminal careers and events. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 503 | Research Methods | Introduces data analysis; overview of research methods used in social science research, including experimental design, survey research, field research, and evaluation research. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 504 | Statistical Tools for Criminology and Criminal Justice | Focuses on essential statistical analysis that can be used in criminal justice and related agencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 505 | Theory and Practice in Criminal Justice | Capstone course for the MA in Criminal Justice; provides a synthesis of the criminal justice system. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 510 | Criminal Justice Planning and Program Evaluation | Examines the application of alternative models of strategic planning to the criminal justice system. Covers methods of evaluating criminal justice policies and practices. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 511 | Applied Data Analysis in Criminal Justice | Examines a variety of tools used in the analysis of criminal justice data, including GIS mapping. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 512 | Seminar in Policing | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 513 | Seminar in Courts and Sentencing | Overview of the nature, proposed principles, and theoretical doctrine of the courts and sentencing policies in criminal justice. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 514 | Seminar in Corrections | Theory, research, and policy issues regarding community-based and institutional correction programs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 515 | Seminar in Women and Crime | Introduces students to issues regarding women and the criminal justice system, focusing on their roles as offenders, victims and professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 516 | Seminar in Criminal Justice Organization and Management | Graduate-level review of policing and police organizations. Seminar examines research on police strategies and practices designed to address crime. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 517 | Seminar on Juvenile Delinquency and Juvenile Justice | Examines patterns and correlates of delinquency within the context of theories of delinquency. Reviews the response of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 518 | Seminar on Race/Ethnicity, Crime, and Justice | Theoretical perspectives and research on the overrepresentation of racial minorities as victims, offenders, and defendants in the criminal justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 519 | Seminar on Victimization | Examines theory and research concerning victimization and consequences for victims, society, and the justice system. Also examines effective responses to victims' post-crime needs. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 520 | Seminar on Violent Crime | Examines patterns and correlates of violent crime, as well as prevention strategies and policy implications. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 521 | Seminar on the Nature of Crime | Examines patterns and correlates of crime at individual, situational, and aggregate levels. Topics include defining crime, offender typographies, and criminal careers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 522 | Seminar on Gangs and Crime | Theoretical perspectives and research on gangs and crime, and on the role of the community and the criminal justice system in causes and control. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 524 | Seminar on Punishment and Society | Examines the fundamental philosophical principles of justice and punishment. Includes a comparative and historical perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 525 | Seminar on Life-Course Criminology | Provides an intensive examination of life-course explanations of crime, the life-course perspective and a theoretical orientation, and research methods used in life-course research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 526 | Theories of Crime Causation | | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): Criminal Justice MA or Criminology and Criminal Justice MS or PhD major; Credit is allowed for only CRJ 526 or 598 (Theories of Crime Causation) |

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| CRJ | 527 | Police Accountability | Examines the great authority of police, the various and most common ways that police abuse that authority, the consequences of those abuses, and accountability mechanisms that can prevent those abuses from occurring. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Justice major; Credit is allowed for only CRJ 527 or 598 (Police Accountability) |
| CRJ | 528 | Prison and Jail Administration | Overview of prison and jail administrative practices, with emphasis on policy and management issues in modern correctional institutions. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminal Justice MA or Criminology and Criminal Justice MS or Criminology and Criminal Science PhD student |
| CRJ | 529 | Community Corrections | Provides a review of theory, research and policy focusing primarily on correctional strategies and programs that take place within the community setting, as well as the function of community corrections within the larger correctional system. Gives particular attention to the purpose and goals of community-based corrections; the historical development of probation and parole practices; and contemporary community corrections programs and strategies such as evidence-based practices, risk assessment, offender reentry, sex offender management, diversion, restitution, community service programs and other emerging alternatives to traditional incarceration. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: MA in Criminal Justice or MS in Criminology and Criminal Justice or PhD in Criminology and Criminal Science student |
| CRJ | 553 | Terrorism and Weapons of Mass Destruction | Historical evolution of terrorism and weapons of mass destruction. Analyzes current theories and mitigation, preparedness, and response tactics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 554 | Homeland Security | Presents skills necessary to develop policies, strategies, programs, and organizational structure of an all hazards/all risk homeland security program. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only PAF 461 or 554 |
| CRJ | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Pre-requisite: Criminology and Criminal Justice MS student |
| CRJ | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-4 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): Master of Arts in Criminal Justice or Master of Science in Criminology & Criminal Justice or PhD in Criminology & Criminal Justice students |
| CRJ | 601 | Seminar on Criminological Theory | Examines historical and contemporary criminological theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 602 | Seminar on Criminal Justice Policies and Practices | Analyzes responses to crime and the operation of criminal justice system, with emphasis on theory and research on effectiveness of policies and practices of the system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 603 | Advanced Research Design | Exposes students to advanced topics in research design and methodology in preparation for writing the doctoral dissertation. | N | RSC | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |

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| CRJ | 604 | Advanced Statistical Analysis | Use and application of advanced statistical techniques and multivariate analysis of data. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 605 | Topics in Quantitative Methods | Explores advanced techniques of statistical analysis within the field of criminal justice. | N | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 606 | Advanced Topics in Theoretical Criminology | Focuses on criminological theory construction, historical and contemporary theoretical debates within criminology, theory testing, empirical support for theories, and theoretical integration. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 607 | Advanced Topics in Policing | Covers the major issues related to policing and police organizations in the United States. Principal focus on policing and police organizations in large cities, with a focus on police organizational structure, police culture, police organizational environment, police decision making and change in the police organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 608 | Advanced Topics in Courts and Sentencing | Focuses on recent research on charging, plea bargaining, bail decision making, jury decision making and sentencing, as well as the impact of recent reforms directed at the criminal court system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 609 | Advanced Topics in Corrections | Provides a critical examination of the theoretical framework underpinning current correctional policy (institutional and community based), as well as advanced, in-depth analyses of contemporary issues surrounding corrections. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 610 | Advanced Topics in Juvenile Justice | Examines the meaning of the concept of juvenile delinquency as a separate entity in the criminal justice system. Considers the relationship between social attitudes and definitions of youthful law violation, and reviews studies on various forms of delinquency, such as drug offenses, sex delinquency, and status offenders. Also focuses on the internal workings of the juvenile justice system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 611 | Advanced Topics in Crime and Victimization | Examines research on criminal offending and victimization, focusing on the correlates of offending and victimization, risk and protective factors, and policies designed to reduce the impact of crime on victims. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 612 | Advanced Topics in Race, Gender, and the Criminal Justice System | Examines the interrelationships among race and ethnicity, gender, crime and the criminal justice system. Focuses on theoretical perspectives and empirical research on racial minorities and women as victims, offenders, and criminal justice professionals. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 613 | Qualitative Methods | Provides students with an examination of the design, execution, and write-up of qualitative research. Discusses methods of data collection, including participant-observation, ethnography, and interviewing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 3 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CRJ | 792 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CRJ | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Criminology and Criminal Justice | 1-15 | | Pre-requisite: Criminology and Criminal Justice PhD student |
| CSE | 100 | Principles of Programming with C++ | Principles of problem solving using C++, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 110 | Principles of Programming | Concepts of problem solving using an object-oriented programming language, algorithm design, structured programming, fundamental algorithms and techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |
| CSE | 120 | Digital Design Fundamentals | Number systems, conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 180 | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| CSE | 180 | Computer Literacy | Students gain fluency in integrating technology to efficiently and effectively solve problems using computational thinking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | |

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| CSE | 182 | Applied Problem Solving with C#.Net | Introduces object oriented programming, problem solving, fundamental algorithms and techniques, computer systems concepts, and implementation of programs using Visual C#.Net platform. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | |
| CSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 205 | Object-Oriented Programming and Data Structures | Problem solving by programming with an object-oriented programming language. Introduces data structures. Overview of computer science topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | CS | Pre-requisite: CSE 110 with C or better. Credit is allowed for only ACO 102 or CSE 205 or CST 200 |
| CSE | 220 | Programming for Computer Engineering | Introduction to C/C++, systems programming, and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 205 with C or better |
| CSE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization. Instruction set architecture. Assembly language. Processor organization and design. Memory organization. IO programming. Exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: CSE 120 or EEE 120 with C or better; CSE 100, 110 or 200 with C or better OR Computer Science or Computer Systems Engineering Graduate student; Credit is allowed for only CSE 230 or EEE 230 |
| CSE | 240 | Introduction to Programming Languages | Introduces the procedural (C/C++), applicative (LISP/Scheme), and declarative (Prolog) languages. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): CSE 205 with C or better or Geographic Information Science major with GIS 321 with C or better |
| CSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 301 | Computing Ethics | Ethics for computing majors: history of computing, intellectual property, privacy, ethical frameworks, professional ethical responsibilities, and risks of computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 205 with C or better |
| CSE | 310 | Data Structures and Algorithms | Advanced data structures and algorithms, including stacks, queues, trees (B, B+, AVL), and graphs. Searching for graphs, hashing, external sorting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s) with C or better: CSE 220 or 240; MAT 243 (or 300 for CMS); Computational Math Sci (CMS), Computer Science, Computer Systems Engineering, Digital Culture (Media Proc), Engineering Management, Geo Info Sci or Informatics or BMI/CSE grad |
| CSE | 320 | Design and Synthesis of Digital Hardware | Design and synthesis of digital hardware with hardware description language, computer-aided design tools, and programmable devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better |
| CSE | 325 | Embedded Microprocessor Systems | System-level programming and analysis of embedded microprocessors systems. Fundamental concepts of digital system design for embedded system applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 220 with C or better; CSE 230 or EEE 230 with C or better; Credit is allowed for only CSE 325 or 421 |
| CSE | 340 | Principles of Programming Languages | Formal syntactic and semantic descriptions, compilation and implementation issues, and theoretical foundations for several programming paradigms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineer BSE or Computer Science BS student; CSE 310 with C or better; CSE 230 or EEE 230 with C or better OR CSE Graduate student |
| CSE | 355 | Introduction to Theoretical Computer Science | Introduces formal language theory and automata, Turing machines, decidability/undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS students; CSE 310 with C or better OR CSE Graduate student |
| CSE | 360 | Introduction to Software Engineering | Software life cycle models; project management, team development environments and methodologies; software architectures; quality assurance and standards; legal, ethical issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): CSE 220 or 240 with C or better; Biomedical Informatics BS or Computer Science BS or Digital Culture (Media Processing) BA or Geographic Information Science BS or Computer Systems BSE or Engineering Mgmt BSE, or Computer Science graduate |
| CSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | |
| CSE | 408 | Multimedia Information Systems | Design, use, and applications of multimedia systems. Introduces acquisition, compression, storage, retrieval, and presentation of data from different media such as images, text, voice, and alphanumeric. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Science and Engineering graduate student |
| CSE | 412 | Database Management | Introduces DBMS concepts. Data models and languages. Relational database theory. Database security/integrity and concurrency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Biomedical Informatics BS or Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Science and Engineering graduate student; Credit allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| CSE | 414 | Advanced Database Concepts | Object-oriented data modeling, advanced relational features, JDBC and Web access to databases, XML and databases, object-oriented databases, and object-relational databases. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 412 with C or better |
| CSE | 420 | Computer Architecture I | Computer architecture. Performance versus cost tradeoffs. Instruction set design. Basic processor implementation and pipelining. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 (or CSE 330) with C or better; CSE 310 with C or better OR Computer Engineering graduate student |

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| CSE | 423 | Systems Capstone Project I | Development process: specification, design, implementation, evaluation, and testing with economic, social, and safety considerations. Technical communication and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Prerequisite(s): Computer Systems Engineering BSE student; senior academic level; Prerequisite(s) with C or better: CSE 310, 320, 325 and 360; Credit is allowed for only CSE 423 or 485 |
| CSE | 424 | Systems Capstone Project II | Continuation of capstone project started in CSE 423. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Systems Engineering BSE student; Senior standing; CSE 423 with C or better |
| CSE | 430 | Operating Systems | Operating system structure and services, processor scheduling, concurrent processes, synchronization techniques, memory management, virtual memory, input/output, storage management, and file systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR CSE Graduate student |
| CSE | 432 | Operating System Internals | IPC, exception and interrupt processing, memory and thread management, user-level device drivers, and OS servers in a modern microkernel-based OS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 430 with C or better |
| CSE | 434 | Computer Networks | Network architecture and protocols, principles of network applications, socket programming, flow and congestion control, switching and routing, link-layer technologies, traffic capture and analysis, security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 230 or EEE 230 with C or better; CSE 310 with C or better OR Computer Science and Engineering graduate student; Credit is allowed for only ACO 330 or CSE 434 |
| CSE | 438 | Embedded Systems Programming | Development of embedded system software, I/O handlers, and multiple threaded programs. Scheduling algorithms. Embedded software structures. Real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 325 with C or better OR Computer Science and Engineering graduate student |
| CSE | 440 | Compiler Construction I | Introduces programming language implementation. Implementation strategies such as compilation, interpretation, and translation. Major compilation phases such as lexical analysis, semantic analysis, optimization, and code generation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 445 | Distributed Software Development | Distributed system architectures and design, service-oriented computing, and frameworks for development of distributed applications and software components. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 360 with C or better OR Computer Science and Engineering graduate student |
| CSE | 446 | Software Integration and Engineering | Software development using architecture design, composition, workflow, services, data resources, data representations, data management, and development tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engr BSE major; Pre- or corequisite(s): CSE 445 with C or better if completed OR Computer Science and Engr grad student; Credit allowed for only CSE 446 or 598 (Software Integration & Engineering) |
| CSE | 450 | Design and Analysis of Algorithms | Design and analysis of computer algorithms using analytical and empirical methods; complexity measures, design methodologies, and survey of important algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Systems Engineering BSE or Computer Science BS major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 457 | Theory of Formal Languages | Theory of grammar, methods of syntactic analysis and specification, types of artificial languages, relationship between formal languages, and automata. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 459 | Logic for Computing Scientists | Propositional logic, syntax and semantics, proof theory versus model theory, soundness, consistency and completeness, first order logic, logical theories, automated theorem proving, ground resolution, pattern matching unification and resolution, Dijkstras logic, proof obligations, and program proving. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 355 with C or better |
| CSE | 460 | Software Analysis and Design | Object-oriented and structured analysis and design; software architecture and design patterns; component-based development; software safety and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Geographic Information Science BS or Computer Systems Engineering BSE major; CSE 360 with C or better OR Computer Science and Engineering graduate student |
| CSE | 463 | Introduction to Human Computer Interaction | Design, evaluate, and implement interactive software intended for human use. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Informatics BS or Digital Culture (Media Processing) BA major; CPI 310 with C or better OR Computer Science and Engineering graduate student |
| CSE | 464 | Software Quality Assurance and Testing | Software quality assurance (SQA), software quality metrics, software configuration management, software verification and validation, reviews, inspections, understanding software testing process, functional testing, structural testing, model-based testing, integration, system, and regression testing techniques, software life cycle models and software testing, testing distributed software, bug management, and use of testing tools. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: BSE Computer Systems Engineering or BS Computer Science student; CSE 360 with C or better; Credit is allowed for only CSE 464, 494 or 598 (Software Quality Assurance and Testing) |
| CSE | 465 | Information Assurance | Concepts of information assurance (IA); basic IA techniques, policies, risk management, administration, legal and ethics issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisites: Computer Information Systems BS, Computer Systems Engineering BSE, Computer Science BS or Industrial Engineering BSE student; CIS 300 (or CSE 310 or IEE 305) with C or better |
| CSE | 466 | Computer Systems Security | Countermeasures to attacks to computer systems from miscreants (or hackers) and basic topics of cryptography and network security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |
| CSE | 467 | Data and Information Security | Basic concepts of security and privacy, data and database security, access controls, trust models, watermarking, and private information retrieval. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science BS or Computer Systems Engineering BSE student; CSE 310 with C or better |

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| CSE | 468 | Computer Network Security | Practical network security exposure and hands-on experience about basic concepts, case studies, and useful tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; CSE 310 with C or better OR Computer Engineering graduate student |
| CSE | 469 | Computer and Network Forensics | Identification, extraction, documentation, interpretation, and preservation of computer media for evidentiary purposes, file system forensics, and network forensics. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): CSE 310 with C or better OR Computer Science and Engineering graduate student; Credit is allowed for only CSE 469 or CSE 598 (Computer and Network Forensics) |
| CSE | 470 | Computer Graphics | Introduces basic concepts of interactive computer graphics, realistic rendering, and 3-D viewing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS, Geographic Information Science BS, Digital Culture (Media Processing) BA or Computer Systems Engineering BSE student; CSE 310 with C or better; MAT 342 or MAT 343 |
| CSE | 471 | Introduction to Artificial Intelligence | State space search, heuristic search, games, knowledge representation techniques, expert systems, and automated reasoning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE, Computer Science BS or Geographic Information Science BS student; CSE 240 with C or better; CSE 310 with C or better |
| CSE | 472 | Social Media Mining | Network measures, social network analysis, network models, random graphs, small-world model, power laws, data mining, influence and homophily, information diffusion, epidemics, behavioral analysis, recommendation in social media, community detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite with C or better: CSE 310; IEE 380; MAT 343; Computer Science or Computer Systems Engineering major; Credit is allowed for only CSE 472 or 494 (Social Media Mining) |
| CSE | 476 | Introduction to Natural Language Processing | Principles of computational linguistics, formal syntax, and semantics, as applied to the design of software with natural (human) language I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; CSE 310 with C or better |
| CSE | 477 | Introduction to Computer-Aided Geometric Design | Introduces basic concepts of 3-D computer geometry, including curves, surfaces, meshes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science BS or Computer Systems Engineering BSE major; MAT 342 or 343 with C or better OR Computer Science and Engineering graduate student |
| CSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): junior or senior standing |
| CSE | 485 | Computer Science Capstone Project I | First course in capstone sequence for computer science majors emphasizing development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS major; Senior standing; CSE 310 with C or better; CSE 340 with C or better; CSE 360 with C or better; Credit is allowed for only CSE 423, 461 or 485 |
| CSE | 486 | Computer Science Capstone Project II | Second course in capstone sequence for computer science majors continuing the development process, technical skills, teamwork, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | L | Pre-requisite: Computer Science BS student; Senior standing; CSE 355 and 485 with C or better |
| CSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| CSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Pre-requisite: CSE 310 with C or better |
| CSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-7 | | Pre-requisite: Computer Systems Engineering BSE or Computer Science BS student; Minimum cumulative GPA of 2.50 or Graduate Engineering student |
| CSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-3 | | |
| CSE | 509 | Digital Video Processing | Concepts of digital video compression, video analysis, video indexing, browsing and retrieval, video transmission over networks, video processors, and relevant industry standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 510 | Database Management System Implementation | Implementation of database systems. Data storage, indexing, querying, and retrieval. Query optimization and execution, concurrency control, and transaction management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 511 | Semi-Structured Data Management | Addresses the data management issues for semi-structured data, which are commonly found in Web applications. Covers techniques on modeling, storing, querying and searching data without schemas, with optional confidence, and/or provenance information. Requires knowledge on relational databases and programming skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 512 | Distributed Database Systems | Distributed database design, query processing, and transaction processing. Distributed database architectures and interoperability. Emerging technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |

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| CSE | 515 | Multimedia and Web Databases | Data models for multimedia and Web data; query processing and optimization for inexact retrieval; <u>advanced indexing, clustering, and search techniques.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 520 | Computer Architecture II | Computer architecture description languages, computer arithmetic, memory-hierarchy design, parallel, vector, multiprocessors, and input/output. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 522 | Real-Time Embedded Systems | Development of real-time embedded systems, scheduling algorithms, embedded software structures, real-time operating system. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science, Computer Engineering, Master of Engineering or Engineering Science (Software Engineering) Graduate student |
| CSE | 530 | Embedded Operating System Internals | Investigating Linux source including: memory management, kernel synchronization and driver design topics. Designing, coding, testing, and evaluating embedded operating system software in a Linux environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 531 | Distributed and Multiprocessor Operating Systems | Distributed systems architecture, remote file access, message-based systems, object-based systems, client/server paradigms, distributed algorithms, replication and consistency, and multiprocessor operating systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 534 | Advanced Computer Networks | Advanced network protocols and infrastructure, applications of high-performance networks to distributed systems, high-performance computing and multimedia domains, <u>special features of networks.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 535 | Mobile Computing | Mobile networking, mobile information access, adaptive applications, energy-aware systems, location-aware computing, <u>mobile security and privacy.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 536 | Advanced Operating Systems | Protection and file systems. Communication, processes, synchronization, naming, fault tolerance, security, data replication, and coherence in distributed systems. Real-time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 539 | Applied Cryptography | Uses cryptography for secure protocols over networked systems, including signatures, certificates, timestamps, electrons, <u>digital cash, and other multiparty coordination.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 543 | Information Assurance and Security | Comprehensive understanding of information assurance and security problems with the solutions as well as <u>hands-on experiences about applying these solutions.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 545 | Software Security | Theories and tools for software security, including secure design, threat analysis and modeling, security testing and coding. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 548 | Advanced Computer Network Security | Comprehensive understanding of network security and corresponding solutions, including cryptography, access control, secure Web transactions, e-mail security, and viruses. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 550 | Combinatorial Algorithms and Intractability | Combinatorial algorithms, nondeterministic algorithms, classes P and NP, NP-hard and NP-complete problems, and intractability. Design techniques for fast combinatorial algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 552 | Randomized and Approximation Algorithms | Introduces two important areas of algorithm design for graduate students. A randomized algorithm is allowed to rely on the outcome of a random experiment in deciding on its next step. In many applications, randomized algorithms are simpler than any deterministic algorithms known, but in several cases, they are in fact more powerful or more efficient than any deterministic algorithms. Covers basic paradigms for randomized algorithm design and analysis, as well as for derandomization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 555 | Theory of Computation | Rigorous treatment of regular languages, context-free languages, Turing machines and decidability, reducibility, and other advanced topics in <u>computability theory.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 556 | Game Theory with Applications to Networks | Strategic conflict as matrix games, notions of equilibrium, definition and existence of Nash equilibrium, zero-sum games, extensive-form games, Bayes Nash equilibrium, potential games, routing games, algorithmic game theory, computation of Nash equilibrium, incentives and pricing in communication networks, application of game theory in wireless networks. Knowledge of calculus, discrete mathematics, probability theory and algorithms is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student; Credit is allowed for only CSE 556 or CSE 591 (Game Theory with Applications to Networks) |
| CSE | 561 | Modeling and Simulation Theory and Application | Modeling theories, simulation protocols, object-oriented modeling, model design, simulation analysis, network-based systems, discrete-event modeling, continuous modeling, <u>hybrid modeling.</u> | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 563 | Software Requirements and Specification | Examines the definitional stage of software development; analysis of specification representations, formal methods, and techniques emphasizing important application issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 564 | Software Design | Examines software design issues and techniques. Includes a survey of design representations and a comparison of design methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |

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| CSE | 565 | Software Verification, Validation, and Testing | Test planning, requirements-based and code-based testing techniques, tools, reliability models, and statistical testing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 566 | Software Project, Process, and Quality Management | Project management, risk management, configuration management, quality management, and simulated project management experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 569 | Fundamentals of Statistical Learning and Pattern Recognition | Concepts of statistical pattern recognition, Bayesian decision theory, parameter estimation, discriminant analysis, basics of artificial neural networks, basics of data clustering. Knowledge of college-level calculus, linear algebra, basic probability theory and proficiency in computer programming is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Engineering or Computer Science Graduate student; Credit is allowed for only CSE 569 or 591 (Statistical Learning and Pattern Recognition) |
| CSE | 570 | Advanced Computer Graphics I | Hidden surface algorithms, lighting models, and shading techniques. User interface design. Animation techniques. Fractals and stochastic models. Raster algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 571 | Artificial Intelligence | Definitions of intelligence, computer problem solving, game playing, pattern recognition, theorem proving, and semantic information processing; evolutionary systems; heuristic programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 572 | Data Mining | Advanced data mining techniques: classification, clustering, association, preprocessing; performance evaluation; information assurance. Web mining, security and privacy issues, and other applications. Students must have a solid background in database management systems, search, learning, and statistics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 574 | Planning and Learning Methods in AI | Reasoning about time and action, plan synthesis and execution, improving planning performance, applications to manufacturing intelligent agents. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 575 | Statistical Machine Learning | Spectral clustering, regression, classification, semi-supervised learning, feature reduction, manifold learning, ranking, kernel learning and multitask learning. | N | LEC | N | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering MCS, MS, or PhD major; Credit is allowed for only CSE 575 or 591 (Machine Learning) |
| CSE | 576 | Topics in Natural Language Processing | Comparative parsing strategies, scoping and reference problems, nonfirst-order logical semantic representations, and discourse structure. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 577 | Advanced Geometric Modeling I | Advanced concepts of geometric modeling: rectangular and triangular surfaces, triangle meshes, Voronoi diagrams, discrete and continuous shape measures, volumes and volume visualization. Students must have a solid background in linear algebra, calculus, and basic 3D graphics to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 579 | Knowledge Representation and Reasoning | Covers knowledge representation and reasoning algorithms in artificial intelligence, shows how they can be used in practice, and provides an overview of current research trends. | N | LEC | N | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 3 | | Pre-requisite: Computer Science or Computer Engineering Graduate student; Credit is allowed for only CSE 579 or 591 (Knowledge, Represent/Reasoning) |
| CSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | |
| CSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| CSE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-4 | | Prerequisite(s): Computer Science or Computer Engineering graduate student |
| CSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Computer Science and Engineering Program | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| CSM | 201 | Introduction to Community Sports | Examines the role of community sports at the local, national and international levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CSM 201 or PRM 201 |
| CSM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| CSM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| CSM | 305 | Sports Facility Operations and Management | Overview of the management and operations of sports facilities. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Community Sports Management major; CRD 210 (or NLM/PRM/TDM 210) with C or better; MAT 142 or higher; minimum 2.50 cumulative GPA; minimum 45 hours |
| CSM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| CSM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| CSM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| CSM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better. Credit is allowed for only CSM 402, NLM 402, PRM 402 or TDM 402 |
| CSM | 407 | Ethics and Legal Issues in Sports | Comprehensive look at ethical decision making from many perspectives in the sports environment. Presents legal issues as they relate to history, present society and future trends. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: CSM 201 |
| CSM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| CSM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |
| CSM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |

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| CST | 100 | Object-Oriented Software Development | Introduces problem solving with a state-of-the-art programming language. Expressions, statements, basic control flow and methods. Data, data aggregation and usage. Uses a structured personal software development process to implement solutions representative of common computing applications. Uses development kits for some course activities. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| CST | 111 | Introduction to Game Development | Introduces fundamental video game development concepts and techniques prevalent in video game industry. Provides opportunity to understand these techniques and learn how they are applied during the production of a video game. Includes game design, game production, asset production, game programming, game art and animation. Hands-on experience by writing 2D game prototypes while learning different game mechanics and features. Intended to serve as an introduction into the game production cycle, breaking down the complex process of game creation into a simple step-by-step program. No programming knowledge is required; however, some degree of computer proficiency is desirable. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Credit is allowed for only CST 111 or 194 (Intro to Game Development) |
| CST | 150 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Pre-requisite: CST 100, EGR 101 or SER 101 (or be co-enrolled in CST 100); MAT 117 or higher; Credit is allowed for only CST 150 or SER 232 |
| CST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| CST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 200 | Core Data Structures with Object Oriented Programming | Design, implementation and use of core data structures; object-oriented software development: design, analysis and programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100 (or 211) with C or better; Credit is allowed for only ACO 102, CSE 205 or CST 200 |
| CST | 201 | Object-Oriented Software Development II Lab | Hands-on development and programming using objects, inheritance, and polymorphism; GUI programming; introduction to software engineering concepts, UML tools. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre/Co-requisite: CST 200 |
| CST | 211 | Intermediate Game Development | Introduces multiplayer games, artificial intelligence, and tile-based worlds using a scripted programming environment. Uses game scripting to automate, repeat, change, anticipate, and govern the action of games from a simple word game to a complicated multiplayer game like pool. Introduces gaming terminology and basic genres, enhancements such as fine-tuning graphics, creating optimal soundtracks, and using high score lists, as well as creating and modifying online chat files. Introduces video game scripting to the student. Scripting skills are essential in every aspect of game development and are used by designers, programmers, and artists in the game industry. Students learn the core scripting skills required to implement game features and apply those to enhance the prototype created in the introductory course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 111; Credit is allowed for only CST 211 or 294 (Intermediate Game Development) |
| CST | 220 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| CST | 230 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |
| CST | 250 | Microcomputer Architecture and Programming | Microcomputer architecture, instruction set, assembly language programming and debugging, I/O considerations, memory interface, peripherals and busses, exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 100; CST 150 or SER 232 |
| CST | 251 | Microcomputer Architecture and Programming Laboratory | Hands-on experience in assembly language programming and debugging. May be taken concurrently with, or subsequent to, CST 250. | N | LAB | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: EGR 101 (or CST 100), or CST 150; Pre/Co-requisite: CST 250 |
| CST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 315 | Software Enterprise I: Tools and Process | Introduces tools and techniques used in software enterprise/development, including coding, design, testing, configuration management, and personal process management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 230 or SER 222 |
| CST | 335 | Applications of Computer Theory | Introduces and applies formal language theory and automata, Turing machines, decidability, undecidability, recursive function theory, and complexity theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 230; MAT 243 |

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| CST | 350 | Digital Design with Hardware Description Languages | Digital system design using Verilog. Structural and behavioral modeling. Design examples include finite-state machines, RISC CPUs, and UARTs. Requires design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 4 | | Prerequisite(s): CST 150 or SER 232 or Fulton Polytechnic School graduate student |
| CST | 386 | Operating Systems Principles | Fundamentals of operating systems, process management, scheduling and synchronization techniques, memory and file management, protection and security issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 222) and CST 250 (or CST 251) |
| CST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 415 | Software Enterprise III: Inception and Elaboration | Third course in the four-course enterprise sequence. Students perform inception (project launch) and elaboration (requirements analysis) activities in project teams. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | L | Pre-requisite: CST 316; ENG 101, ENG 105 or 107 |
| CST | 416 | Software Enterprise IV: Project and Process Management | Project-centric course focusing on applying software process, project management, and technical leadership. Final course in the software enterprise sequence. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 415; ENG 102, 105, 108 or 112 |
| CST | 420 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| CST | 425 | Server Software Programming | Design and implementation of software servers, threaded socket servers, servers for distributed Web-based applications; security for the Web. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 427 | Distributed Object Systems | Distributed applications with Web services, NET, RMI, CORBA, concepts and frameworks for managing, registering, locating, and securing distributed object applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 428 | Web-Client User Interface Programming | Client-server model for window interfaces. Java Swing, Applets, mark-up and scripting languages; Web tools and related technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 433 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management), or Credit is allowed for only ACO 220 or ACO 320 or CSE 412 or CST 433 |
| CST | 441 | Software Development for Mobile Devices | Mobile computing using Java's K, Virtual Machine, MIDP for wireless applications; user interfaces, persistent data storage, and networking. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 420 with C or better |
| CST | 450 | Computer Architecture | Price/performance analysis, instruction set design, RISC/CISC, processor design and implementation, pipelining, instruction-level parallelism, memory hierarchy, storage and I/O systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250 |
| CST | 452 | Digital Systems Synthesis with Hardware Description Languages | Uses a hardware description language to synthesize components of computers and digital systems as FPGAAs. Emphasizes optimization and satisfying performance constraints of system scale designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 350 |
| CST | 456 | Embedded Interfaces: Sensors and Actuators | Electromechanical sensors and electrical actuators, analog-to-digital and digital-to-analog conversion, hardware and software interfaces for embedded systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 150 (or SER 232) and CST 200 |
| CST | 458 | Digital Computer Networks | Network hardware and software, topologies, protocols, OSI model, LANs, WANs, Internet; basic concepts of packet switching, routing, error controlling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 250; CST 251 or IFT 201 or BAS student |
| CST | 460 | Computer Graphics with Applications | Hands-on course introduces 2D and 3D computer graphics programming and some of the applications related to the topic in a studio-style learning environment. Uses data structures for computer graphics, and a graphics API such as OpenGL taught with industry examples. Intended for upper-division (senior) students in CST programs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 100 (or EGR 102); CST 230 (or SER 221) |
| CST | 483 | Cyber Security Capstone Project | Applies security techniques to a real-world situation. Development of security policy, risk solutions, and incident response facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 2 | | Pre-requisite: BAS student; CST 481 or CST 489; Pre/Co-requisite: CST 482 |
| CST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| CST | 486 | Embedded C Programming | Programming concepts for embedded systems. Interfacing and controlling LED, LCD, keypads, buttons. Embedded OS concepts. Timers and interrupts. Serial communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): undergraduate or nondegree Engineering student; CST 350 and 383 with C or better OR SER 222 with C or better; minimum 2.25 GPA OR graduate Engineering student |
| CST | 490 | Reading and Conference | | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| CST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |

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| CST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| CST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 496 | Ethics and Professionalism in Computing | Studies major social and ethical issues in computing, including impact of computing on society, ethical behavior, and social responsibility. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 1 | | Pre-requisite: Junior or Senior standing |
| CST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| CST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| CST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| DAH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DAH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DAH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DAH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DAH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAH | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DAN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DBA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| DBA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 701 | Macroeconomic Policies in a Global Environment | Provides the framework for policy makers when facing macroeconomic situations, the tools in analyzing the costs and benefits of alternative policy options, and the knowledge necessary for making recommendations to policy makers and business leaders. Students learn knowledge and skills about global economy and risks that help facilitate dissertation research. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 702 | Global Financial Systems: Markets and Institutions | Examines the overall architecture of the global financial system, its major components, and their functions in the macro economy. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 703 | Global Financial Systems- Institutional Investing | A large fraction of investors around the world invest in securities markets indirectly, viz. through mutual funds or separate accounts established with investment managers, whether they be endowments, foundations, pension plans or sovereign funds. Exposes students to the global marketplace for such portfolios. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 704 | Design of Knowledge Base Organizations for Performance and Innovation | Covers various issues on executive compensation and management pay structure with a particular emphasis on aligning business strategy, organization design to the choice of performance standards and pay structure for managers. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 705 | Global Corporate Strategy | Demonstrates that decisions affecting the international expansion of a firm are neither obvious nor totally determined by the technological or economic forces generally associated with globalization. Addresses the most transcendental decisions that multinational firms face in the course of conducting business across borders. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 706 | Strategic Visioning, Leadership and Change Management | Addresses the interrelationship among organizational culture, leadership, and the management of change in order to promote continuous improvement of the organization's market position. Addresses the role of strategy, how strategy explicates vision, and how effective strategies are created. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |

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| DBA | 707 | Risk Management : An Enterprise Perspective | Provides an understanding of the broad set of risks an enterprise faces; their origin, characteristics and potential impact on business; and how they can be efficiently managed at the enterprise level. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 708 | Challenges of Corporate Finance and Governance | Helps students understand the link between finance and corporate strategies, as well as examine ways to establish and reform the practices of corporate governance in China. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 709 | Finance and Law | Helps students learn about the philosophy of law, various legal systems, the relationships among law and economics and finance, the practice of law in a global context. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 710 | Financial Decision Making | Provides a framework of conceptual knowledge and enables students to understand what the literature on financial theory is trying to do and how it all fits together. Also provides an in-depth experience with the subject of finance and equips students for their future development as a practicing executive. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 711 | Finanacial Innovations | Focuses on how financial innovations influence the evolution of finance. Discusses many of the major financial innovations in recent history, the forces driving these innovations, their impact on the financial system and the real economy and the risks they bring. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 712 | Advanced Topics in Global Economy and Finance: Domestic Module | Addresses many critical topics facing China today on its quest of globalization, the need for transforming its economic structure, capital markets and corporate control, and its monetary policies. | N | LEC | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 713 | Advanced Topics in Strategy and Management: Domestic | Reexamines many popular best practices through panel discussion and speaker series on why some of those practices failed to work in China, and how firms have creatively modified their strategic undertakings to fit its environment. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 714 | Current Trends in Global Economy, Finance and Management: US Module | Provides first-hand experiences on the world class practices by the multinationals and interactions with the leading experts on the emerging topics of interest on globalization, financial regulations, and managerial innovations. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 715 | Current Trends in Global Economy, Finance and Management: Europe Module | Provides direct exposure to European markets, firms, and institutions, their history, current status, and future directions. | N | LEL | N | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 4 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 721 | Research Seminar I- Research in Action | Provides needed skills for research and thesis work. 1. Focuses mainly on research design and fundamental statistical/survey and field study methods. The key objective is to provide students with the needed required skills and concepts of the scientific method, the philosophy of science, and research design with an emphasis to solve specific problems. This course is spread out during the first year of the program. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 722 | Research Seminar II-Research in Action II | Focuses on the process of research "in actions" through faculty presentation and research workshops. Faculty with diverse research interest and methodologies present up-to-date research works. Through interaction, students gain first-hand experience on learning the process of how faculty, with diverse research interests, are able to identify specific research topic, choosing the right research methodology to address their research questions. The presentation and research workshop are scheduled at the beginning of the second year and throughout the entire year, allowing the program to leverage faculty availability during their course delivery while enabling students to seek out their faculty mentors for future dissertation engagement. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 723 | Research Seminar III- Research in Action III | Provides students with opportunities to present their own research proposal/ thesis ideas while allowing the participating faculty and fellow students to offer constructive comments. | N | SEM | Y | GNA | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 3 | | Pre-requisite: W. P. Carey DBA degree seeking graduate student |
| DBA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | |
| DBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| DBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Dean, W.P. Carey School of Business | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 100 | Introduction to Dance | Overview of dance as a cultural and performative practice, exploring history and theory, philosophy, and movement practices, with reference to key pioneers in the field from around the world. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 110 | Argentine Tango I | Introduces basic movement elements, explores various contexts shaping Argentine Tango, and emphasizes social tango with exposure to vals and milonga timing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 111 | Raqs Sharqi I | Familiarize students with the ancient art of Middle Eastern dance. Covers posture, styling, basic body isolations, rhythm patterns, footwork, as well as the social significance and history of the dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 112 | Capoeira I | Introduces the Afro-Brazilian martial art and movement form capoeira. Molds elements of self-defense, dance, music, song, language, culture and philosophy into the course. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 113 | Dances of Africa I | Introduces basic elements of West and Central African dance styles, including the traditional rhythms and cultural context. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 114 | Dances of India I | Introduces Indian folk dances with an emphasis on the history and various movement elements of an ancient South Indian classical dance form, known as Bharata Natyam. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 115 | Yoga I | Introduces a basic physical and philosophical understanding of yoga. Designed by a certified Yoga instructor. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 115 or 194 (Yoga I) |
| DCE | 116 | T'ai Chi Chuan I | Introduces an ancient Chinese internal martial art form. The structure includes the beginner level of Tai Chi Chuan theory and movement practice. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 117 | Feldenkrais I | The Feldenkrais method is an approach to enhance awareness of the body, improve functional actions, and expand one's repertoire of movements. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 118 | Yoga/Pilates | Provides a basic physical and philosophical understanding of yoga and Pilates mat practices. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 120 | Modern Dance I | Introduces modern dance and its basic principles, including alignment, core muscular strength, and spatial exploration. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 121 | Ballet I | Introduces principles of ballet and development of basic technical skills, including dynamic alignment, functional rotation, and musicality. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 122 | Jazz I | Provides students with beginning-level technique class in different jazz styles. Focuses on alignment, technique, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 123 | Hip Hop I | Equips student with understanding of hip hop dance history, culture and music through studio work on various hip-hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 124 | Latin/Swing/Ballroom I | Introduces major Latin and ballroom dances and focuses on a system of elements that are found in all partnership dances, including movement components, rhythmic patterns, dance positions, and unique characteristics used to better define each dance. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 125 | Latin/Salsa I | Introduces Latin dancing. Instruction focuses on salsa, cha-cha, merengue, and rumba. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 126 | Country-Western | Initiates the student into the rhythm two-step, progressive two-step, night club two-step, country cha-cha, country waltz, triple swing and a multitude of line dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 130 | First-Year Movement Practices I | Introduces diverse somatic movement principles and practices through exploration of movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major |
| DCE | 131 | First-Year Movement Practices II | Modular structure enables a series of short intensive studies including movement, context, theory, and personal reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance student; DCE 130 with C or better |

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| DCE | 133 | Urban Movement Practices I | Designed as an introduction to dance, history, culture, and music in urban movement styles. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, BA Performance and Movement, BIS-Dance, Dance minor; Credit is allowed for only DCE 133, 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) |
| DCE | 134 | Postmodern Contemporary I | Introduces postmodern contemporary dance technique and theory. Designed to enhance the dancer's technical and artistic proficiency by using movement that is athletically challenging, nuanced, and rhythmically complex. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 135 | Contemporary Ballet I | Introduces contemporary view of ballet technique and theory with attention to enhancing student's dynamic alignment. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 136 | Somatic Practices I | Survey course offers a practical and theoretical introduction to some of the major somatic practices evolving out of the 20th century. Guest practitioners and teachers of various embodied practices share theory, practice and context. Explores movement and the integration of the body and mind through a variety of somatic lenses (e.g., the Alexander Technique, Authentic Movement, and experiential anatomy). | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DCE 136 or 194 (Intro Movemnt Language Sources) |
| DCE | 137 | African and Diaspora Movement Practices I | Foundational course in the African and the Diaspora movement practices curriculum. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA, BIS-Dance concentration or Dance minor; Credit is allowed for only DCE 137, 194 (Mvt Practice: Africa/Diaspora), 294 (Mvt Practice: Africa/Diaspora) or 494 (African & Diaspora Mvt Prac) |
| DCE | 160 | First-Year Creative Practices I | Explores creativity and creative processes with reference to some key historical practices and influential artists. Seeks to encourage and develop students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 161 | First-Year Creative Practices II | Explores creativity and creative processes with reference to some key historical practices and influential artists. Encourage and develops students' awareness of their own imagination and creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 160 with C or better |
| DCE | 170 | First-Year Seminar I | Orientation to the university learning environment and profession of dance with emphasis on developing tools and processes for reflection and critical thinking. | N | LEC | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major |
| DCE | 171 | First-Year Seminar II | Continuation of First-Year Seminar I. Focuses on orientation to the larger field of contemporary dance practice with an emphasis on developing tools and processes for reflection, synthesis, and critical thinking. Requires participation in School of Dance "Dance Matters." | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance majors |
| DCE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| DCE | 201 | Dance, Culture, and Global Contexts | Introduces the study of dance as culture in diverse global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & G | |
| DCE | 202 | Dance in U.S. Popular Culture | Investigates vital cultural heritages that have shaped dance in U.S. American popular culture from 20th century to the present. Emphasizes dance as a producer of social space and cultural identity as well as a reflection of diverse social realities and dynamics of power. Following required reading and videos, the course surveys time periods of dance from the late 1800s through the 20th century to the present day. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Credit is allowed for only DCE 202 or 294 (Dance in US Popular Culture) |
| DCE | 203 | Walk this Way | Addresses walking as a key component in movement studies and further brings the study of bodily movements center stage as a means to address the dynamic between self and society. Designed for nonmajors. Not eligible for majors credit. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only DCE 203 or 294 (Walk this Way) |
| DCE | 210 | Argentine Tango II | Builds upon concepts, figures, and elements of the Argetine Tango introduced in level one. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 110 or DAN/DCE 194 (Argentine Tango I) |
| DCE | 211 | Raqs Sharqi II | Focuses on refining beginning technique, advanced movements, layering and musical interpretation. Uses choreography and improvisation to encourage mind-body awareness. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 111 or DAN 194 (Raqs Sharqi I) |
| DCE | 216 | T'ai Chi Ch'uan II | Intermediate-level study of the ancient Chinese martial art of rounded, fluid, balanced movements. Teaches the sets of long form Yang style of Tai Chi Ch'uan in a slow and relaxed manner. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 116 or DAN 194 (T'ai Chi Ch'uan I) |
| DCE | 220 | Modern Dance II | Explores modern dance practices, including somatic techniques, stylistic versatility, and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Credit is allowed for only DAN 130 (Modern II) or DCE 220 |
| DCE | 221 | Ballet II | Explores contemporary and classical ballet practices, focusing on whole body integration and performance strategies. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 222 | Jazz II | Explores intermediate level of jazz dance techniques. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 122 or DAN 130 (Jazz I) |

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| DCE | 223 | Hip Hop II | Intermediate-level class that provides the knowledge of hip hop dance history, culture and music through studio work on various hip hop dance styles. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 123 or DAN 194 (Hip Hop I) |
| DCE | 224 | Latin/Swing/Ballroom II | Continues development of level one Latin/Swing/Ballroom dances to prepare student to have command of the complex rhythmic patterns and figures used in major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 124 or DAN 194 (Latin/Swing/Ballroom I) |
| DCE | 225 | Latin/Salsa II | Reviews and reinforces the basics introduced in Latin/Salsa I and builds upon more complicated concepts and figures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 125 or DAN 194 (Latin/Salsa I) |
| DCE | 230 | Second-Year Movement Practices I | Investigates selected movement forms in the second-year movement practices. New movement forms include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwando, aikido, wushu, LMA, yoga, or somatic bodywork. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 131 with C or better |
| DCE | 231 | Second-Year Movement Practices II | This course is set up in two modules. In module one, students will investigate a movement form, include but are not limited to contact improvisation, Alexander technique, Feldenkrais, Body Mind Centering (BMC), taekwando, aikido, wushu, LMA, yoga, or somatic bodywork. Module two expands the practice of rhythmic awareness through exploration and investigation of the close relation between thought and act, the kinesthetic and the verbal, the text and the beat, as well as the breath and the word. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 230 with C or better |
| DCE | 233 | Urban Movement Practices II | A practical and theoretical investigation of the urban movement forms and practices developed over recent years in urban centers around the world. Addresses the evolution of hip hop/urban movement dance through the study of House style. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors, Performance and Movement major, BIS-Dance Concentration or Dance minor; DCE 123 or 133 or 194 (Intro to Urban Mvt. Practices) or 494 (Urban Movement Practices) with C or better |
| DCE | 234 | Postmodern Contemporary II | Investigation and practices of postmodern contemporary dance technique. Development of movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 235 | Contemporary Ballet II | Explores the possibilities of contemporary ballet technique and theory with awareness of student's individual anatomical differences. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 236 | Somatic Practices II | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | |
| DCE | 240 | Media for Dance | Computer applications for human movement modeling, digital video design and creation, sound composition, and the incorporation of multimedia design elements into online environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | |
| DCE | 260 | Second-Year Creative Practices I | Explores concepts introduced in the first year of creative practice and further expands into the themes of analysis and investigation. Year two experience involves the investigation of learning to compose and construct choreographic material through individual, collaborative, improvisational, and group exploration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 161 with C or better |
| DCE | 261 | Second-Year Creative Practices II | Continues developing students' awareness of their own creative process through individual and group projects involving problem solving, creative tasks, and reflection. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 260 with C or better |
| DCE | 262 | Rhythmic Theory for Dance I | Elements of music, music structures, and their relationship to dance. Emphasis on rhythmic analysis and dance accompaniment. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 270 | Second-Year Seminar I | Continues developing tools and processes for reflection and critical thinking by identifying individual goals and objectives related to the students' current and future academic and professional careers | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 171 |
| DCE | 271 | Second-Year Seminar II | Provides basic understanding of costume design, sound production, and interactive performance for dance. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 270 with a Y |
| DCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 300 | Moving Histories | In-depth study of the history of Western dance in Europe and America. Students learn about various ways of conducting research into dance history, including interviewing, researching using primary resources and performing scholarship. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 101, 105 or 107 with C or better |

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| DCE | 301 | Meaning in Motion | Critical inquiry into the nature of dance through the lens of dance theory. Covers philosophical and theoretical issues raised by the study of dance in relation to specific historical and global contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better |
| DCE | 303 | The Body Condition(ed) | Examines contemporary practices of conditioning the body from a triangulation of perspectives: physical, social, and experiential. Enhances the ability to obtain a holistic understanding of how the self/social dynamic operates within the context of body conditioning. Designed for Non-Majors. Not Eligible for Dance Major Requirements. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | SB | Pre/Co-requisite: ENG 102, ENG 105 or ENG 108 |
| DCE | 324 | Latin/Swing/Ballroom III | Refines dances learned in the intermediate level of Latin and ballroom dances, including foxtrot, waltz, salsa, cha cha, rumba, samba, west coast swing, bolero, tango, and swing. Prepares students to have a more advanced command of the complex rhythms and figures used in the major partnership dances. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: DCE 224 or DAN 294 (Latin/Swing/Ballroom II) |
| DCE | 330 | Third-Year Movement Practices I | Focuses on the application of diverse movement forms and somatic studies in a range of performance contexts. These contexts may include live and mediated performance, community-based projects, pedagogy, analysis of movement forms in relation to musical compositions or the creation of new movement languages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance major; DCE 231 |
| DCE | 331 | Third-Year Movement Practices II | Student will focus on the integration of diverse movement forms and somatic practices, as well as developing an in-depth understanding of a range of performance contexts practically and theoretically. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors; DCE 330 with C or better |
| DCE | 333 | Urban Movement Practices III | A practical and theoretical integration of the urban movement forms that have been investigated and practiced in the urban movement practices curriculum. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: DCE 233 with C or better |
| DCE | 334 | Postmodern Contemporary III | Integrates dance theory and practices of postmodern contemporary dance technique. Refines movement quality and performance skills. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 335 | Contemporary Ballet III | Expansion of student's technical skills and theoretical knowledge through utilization of a hybridized ballet movement vocabulary. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA Performance and Movement or BFA Dance major |
| DCE | 336 | Somatic Practices III | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): minimum 45 hours |
| DCE | 338 | Urban Movement Practices Ensemble | Focuses on building a cooperative practice among artists. The ensemble of dancers and musicians explore the connections between urban musical praxis and urban movement forms in a live, improvisatory setting. Places special emphasis on hybridization, or the blending of musical and gestic traits from two or more genres. Participants are expected to experiment in a cross-disciplinary manner throughout the semester. Course serves as an "experiment lab" for students enrolled in DCE 333 as well as other music and dance students. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): minimum 45 hours; Corequisite(s): DCE 333; Credit is allowed for only DCE 338 or DCE 294 (Urban Movement Practices Ensemble) |
| DCE | 350 | Dance in the Classroom: Learning Through Movement | Explores theories of learning, thought development, and knowledge construction through aesthetic movement experiences. Students look to theories from the fields of aesthetics, phenomenology (study of lived experiences), somatics (study of the soma or body/mind), sociology and epistemology (theory of knowledge) to understand how the intertwined relationship of human thought development and movement patterning can affect children's learning and development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better, Junior standing |
| DCE | 354 | Creative Approaches to Teaching Dance I | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student |
| DCE | 356 | Creative Approaches to Teaching Dance II | Explores creative strategies and methodologies for teaching dance to a variety of populations in diverse settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major |
| DCE | 360 | Third-Year Creative Practices I | Provides an orientation to the field of community dance practice. Students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance BFA student; DCE 261 with C or better |

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| DCE | 361 | Third-Year Creative Practices II | Historical survey of music and compositional elements relative to dance. Emphasis on analysis of choreography from a musical standpoint. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance major; DCE 360 with C or better |
| DCE | 370 | Third-Year Seminar I | Provides an orientation to the field of community dance practice. Over two consecutive semesters, students investigate foundational theories pertaining to the development of community dance worldwide, are exposed to leaders in community dance practice, and have in-depth applied experiences interacting with different populations in a variety of community dance contexts. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 271 with a Y |
| DCE | 371 | Third-Year Seminar II | Hones skills in collaborative approaches, teaching, leading, and facilitation through partnerships with community organizations in the Phoenix metropolitan area. Students study community dance practices covering a range of creative process and community building tools that can be used in diverse settings. Applies research methods, such as data collection, analysis, and reflection, to measure the efficacy of community arts practices. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance major; DCE 370 with a Y. |
| DCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 402 | Ethnography of Dance Practices | Examines the field of ethnochoreology, ethnographic methods, and interpretive research practices. Develops critical writing, thinking, and viewing skills for comparative dance study. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | (L or HU) & G | Pre-requisite: DCE 201 with C or better; ENG 102, 105, or ENG 108 with C or better |
| DCE | 404 | Dance and Ethics | Examines ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Junior standing; ENG 102, ENG 105 or ENG 108 with C or better |
| DCE | 405 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Prerequisite(s): Junior standing; Dance BFA major or nonmajor with DCE 303 (or DCE 394 The Body Conditioned) with C or better. Credit is allowed for only DAN 494 (Rhetorical Moves) or DCE 405 |
| DCE | 438 | Dance Theatre Performance/Production | Performance or technical theatre work in designated dance productions. 3 hours a week per semester hour. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance BFA, Dance minor or BIS Dance concentration |
| DCE | 460 | Transition Project I | Original choreography for group performance with analysis and critique of problems encountered in production. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance BFA student |
| DCE | 461 | Transition Project II | Original research that integrates dance and a related field of interest. Includes production of written document and public presentation. Fall semester must be completed before spring registration. May be repeated for a total of 4 semester hours. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance students; DCE 460 with C or better |
| DCE | 470 | Fourth-Year Seminar | Explores and investigates the larger world of dance as it pertains to transitioning out of the university environment into professional lives. Discussion revolves around career opportunities, options and finding potential work synergies that will parlay into meaningful and exciting lives. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: BFA Dance major; DCE 371; Credit is allowed for only DCE 470 or 494 (4th-Yr Seminar) |
| DCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| DCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| DCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | L | |
| DCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |

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| DCE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 501 | Philosophy of Dance | Analyzes traditional and contemporary theories of dance with regard to issues of expression, form, and meaning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 502 | Cultural Concepts of Dance | Examines the close connections among culture, dance, and movement through writings in cultural theory, dance ethnology, and philosophy. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 504 | Dance and Ethics | Examination of ethical issues as they relate to the field of dance, including the following: the ethical treatment of dancers within educational and professional institutions; the ethical creation of dances sensitive to copyright/appropriation concerns as well as issues of form and content; the ethical engagement of the arts by the state; the ethical use of dance in trauma recovery and community building. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 505 | Rhetorical Moves | Addresses creative practice from the perspective of the embodied creative artist. Embodiment is theorized using a conflation of interdisciplinary concepts to analyze the complex and fluid nexus that occurs as the artist creates. Students theorize the creative artist as a rhetor and the creative practice as a rhetorical situation to understand the deconstructive interaction of the creative act. Explores ways to utilize this new theorization of embodiment for interdisciplinary research into creative practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts graduate students |
| DCE | 530 | Graduate Movement Practices I | The four-semester sequence of graduate movement practices are a sequence of graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Addresses the integrated practices and theoretical underpinnings of Laban/Bartenieff praxis, Body Mind Centering and other somatic practices that are explored within the four-course sequence that facilitate movement exploration, movement functioning, movement performance and movement creation as well as performance and social theory constructs. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 531 | Graduate Movement Practices 2 | The series of graduate movement practices courses are a sequence of two graduate-level movement studies experiences designed to emphasize in-depth psychophysical explorations of specific somatic movement practices and frameworks as well as epistemological frameworks for learning in and through the body. Classroom experiences are approached from theoretically grounded and contextualized perspectives that address through practice current somatic and epistemological thinking. The overarching frameworks for the first and fourth modules are designed as "bookends" for introducing, contextualizing, and synthesizing classroom experiences and concepts explored within the two-course sequence. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 534 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for first-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 535 | Contemporary Ballet | Graduate-level theoretical study and movement practice of contemporary ballet for contemporary dancers. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: MFA Dance student |
| DCE | 536 | Somatic Practices | Laboratory for somatic education that explores the foundations of movement, voice, expression and spatial awareness. Open to nonmajors, the class welcomes and encourages the participation of students from a wide variety of disciplines. Taught through the principles of specific somatic lenses (e.g., the Alexander Technique, Bartenieff Fundamentals, and Body Mind Centering), the course highlights how embodied awareness affects artistic process and choice making, as well as enhancing physical capacities, kinesthetic intelligence, and the refinement of performance and technical skills. Emphasizes developing a holistic perception of ourselves, our relation to one another, and to the environment. Integrated lecture/lab. Prerequisite(s): degree- or nondegree-seeking graduate. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only DCE 536 or DCE 598 (Movement Language Sources) or (Somatic Practices) |
| DCE | 537 | African and Diaspora Movement Practices | Investigates and integrates historical and cultural contexts for West, Central, and South African and Post-African (diasporic) movement practices. Engages movement and physical articulation as tools to examine specific dance cultural knowledge and demonstrate/embody techniques representing that cultural knowledge. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance major; Credit is allowed for only DCE 537 or DCE 598 (African Diaspora Movement Practices) |
| DCE | 538 | Dance Theatre | Performance in specially choreographed dance productions. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 540 | Issues in Media for Dance | Introduces desktop multimedia as it relates to dance creation, production, education, and research. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |

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| DCE | 543 | Sound Design for Dance | Audio mixing for analog/digital recording and editing. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisite: Dance majors |
| DCE | 554 | Graduate Dance Pedagogy | Provides both the theoretical basis and practical application of principles for teaching contemporary dance disciplines in a postsecondary setting. Includes discussion, co-teaching and individual teaching projects and sessions, practical application of course readings, and guest speakers. Both dance and discussion of ideas in each class session. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 560 | Graduate Creative Practices I | Artistic research through the practices of improvisation, choreographic choice making, and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 561 | Graduate Creative Practices II | Explores a variety of contemplative practices designed to cultivate awareness and serve as stimuli for generating choreography and creative approaches in interdisciplinary collaborations. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student; DCE 560 |
| DCE | 563 | Rhythmic Awareness | This course focuses on the kinesthetic aspects of weight, space, and time. It is opportunity for individual exploration as well as an ensemble experience, a chance to come together as a group through the communicative nature of sound, movement, and visual patterns. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 570 | Graduate First-Year Seminar I | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. Seminar. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Dance Graduate student; Credit is allowed for only DCE 570 or DCE 591 (1st Year Graduate Seminar) |
| DCE | 571 | Graduate First-Yr Seminar II | Part of a four-semester sequence that offers a cohort experience to increase awareness of current global dance practices; present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 634 | Postmodern Contemporary | Preparation in the performance and comprehension of professional-level modern dance for second-year graduate students. 6 hours weekly. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Dance Graduate student |
| DCE | 660 | Graduate Creative Practices III | Artistic research through the practices of choreographic choice making, exploration, and experimentation of integrated environments and interdisciplinary collaboration. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |
| DCE | 661 | Graduate Creative Practices IV | Culmination of a four-semester Creative Practices sequence, focusing on articulating individual creative practices and identifying the needs of each student relative to their Applied Projects. Students are also responsible for understanding the content and requirements for the selected modules of this course. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Dance student |

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| DCE | 670 | Graduate Second-Year Seminar I | Part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, presents opportunities for dialoguing about topics significant to fulfilling degree requirements and promotes success in the dance program as well as to facilitate transition into the professional world. Reflection is a key component of the School of Dance curriculum; develops ability and skills in analysis, but more importantly builds awareness of intuitive and habitual patterns of response to new stimuli. The Seminar is a key moment each week to develop a community of inquiry amongst peers. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student; Credit is allowed for only DCE 591 (2nd Yr Seminar) or DCE 670 |
| DCE | 671 | Graduate Second-Year Seminar II | The Second-Year Graduate Seminar is part of a four semester sequence that offers a cohort experience to increase awareness of current global dance practices, present opportunities for dialoguing about topics significant to fulfilling degree requirements and that promote success in the dance program as well as to facilitate transition into the professional world. | N | SEM | N | YGB | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: MFA Dance student |
| DCE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| DCI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| DCI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| DCI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DCI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| DCI | 510 | Teacher as Researcher | Introduces teacher research as a new research genre; offers teachers guidance on planning and conducting research on their practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |

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| DCI | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: COE 501or DCI 510 with B or better |
| DCI | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 701 | Curriculum Theory and Practice | Curriculum theory and practice as a field of study. Its current orientations and applications, modes of inquiry, and community of scholars and practitioners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 702 | Interdisciplinary Research Seminar | Core research course for students in the interdisciplinary PhD in Curriculum and Instruction program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DCI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DCI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Post Baccalaureate Undergraduate student |
| DNP | 601 | Theoretical Foundations for Advance Practice Nursing | Examines philosophical foundations of advanced nursing practice by analyzing interrelationships among theory, philosophy, practice, and research. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 602 | Evaluating Research for Practice | Provides opportunities for graduate students to develop the knowledge and skills to critically analyze scientific literature and research for application to practice. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 604 | Advanced Human Pathophysiology Across Lifespan | Core course focuses on human pathophysiology and concepts of genetics for advance practice nursing. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontolog or Fam Psy MentHlth or Family NP or Women's Hlth NP or Neonatal NP or Pediatric NP) major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |

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| DNP | 605 | Advanced Health Assessment Across Lifespan | Advanced health assessment skills, including history-taking strategies and physical, functional, developmental, and psychosocial assessment. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 608 | Advanced Pharmacotherapeutics Across Lifespan | For advanced practice nurses, expands theoretical and evidence-based knowledge and promotes synthesis of pharmacotherapeutic concepts and principles across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: DNP Adv Nursing Practice major or Family Nurse Practitioner or Family Psychiatric and Mental Health Nurse Practitioner certificate |
| DNP | 609 | Advanced Practice Nursing Role I | Focuses on the historical and contemporary social and political influences on the role of the DNP-prepared advanced practice nurse. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: Doctor of Nursing Practice major |
| DNP | 610 | Advanced Practice Nursing Role II | Focuses on the ethical and professional role of the DNP, negotiation strategies, and preparation of a professional portfolio. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisite: DNP 609 with B or better |
| DNP | 613 | Women's Health Promotion I | Didactic course focuses on theories of health behavior, health promotion, disease prevention and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 614 |
| DNP | 614 | Women's Health Practicum I | Clinical assessment and education of women across the lifespan for the purposes of health promotion and disease prevention. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 613 |
| DNP | 615 | Management of Common Problems in Women's Health | Focuses on management of nursing care for high-risk perinatal women and women with common health problems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 616 |
| DNP | 616 | Advanced Women's Health Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 615 |
| DNP | 617 | Management of Complex and Chronic Disease in Women | Didactic course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health status across the lifespan and patient education. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 618 |
| DNP | 618 | Advanced Women's Health Practicum III | Clinical course focused on using current evidence-based research as the context for the assessment and management of complex and chronic reproductive and gynecologic health status across the lifespan and patient education. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Women's Health student; Co-requisite: DNP 617 |
| DNP | 621 | Health Assessment Skills | Skill-based course focuses on advanced clinical skills including suturing, splinting, x-ray, ECG and advanced lab interpretation. | N | LEL | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): DNP 605 |
| DNP | 623 | Adult-Gerontology Health Promotion | Introduces health promotion and disease prevention for adults across the lifespan emphasizing principles of evidence-based practice in clinical and community settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 624 |
| DNP | 624 | Adult-Gerontology Health Promotion Practicum | Clinical practicum designed to apply principles of evidence-based practice in health promotion and disease prevention in clinical and community settings. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 623 |
| DNP | 625 | Management of Common Health Problems in Adults Across the Lifespan | Includes theory and research that guides the management and maintenance of adults across the lifespan with common health alterations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 626 |
| DNP | 626 | Management of Common Health Problems/Adults Across the Lifespan Practicum | Diagnosis, management, and application of advanced knowledge and skills in caring for adults across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 625 |
| DNP | 627 | Management of Complex Health Alterations in Adults Across the Lifespan | Focuses on application of EBP in care of adults of all ages with complex health alterations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 628 |
| DNP | 628 | Management of Adults Across the Lifespan w/Complex Health Alterations Practicum | Clinical practicum designed to apply principles of evidence-based practice in primary care management of adults across the lifespan with complex health alterations. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Prerequisite(s): DNP Advanced Nursing Practice (Adult-Gerontology Nurse Practitioner) major. Co-requisite(s): DNP 627 |
| DNP | 633 | Family Health Promotion | Focuses on concepts and strategies to promote, manage, and maintain health of children, adults, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major; Co-requisite: DNP 634 |
| DNP | 634 | Family Health Promotion Practicum | Clinical application of theories, concepts, and principles in the care of children. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: Advanced Nursing Practice (Family Nurse Practitioner) major; Co-requisite: DNP 633 |
| DNP | 635 | Management of Common Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of acute and common health problems in family practice across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 636 |
| DNP | 636 | Management of Common Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of acute and common problems in family practice across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 635 |
| DNP | 637 | Management of Complex and Chronic Health Problems in Children, Adults and Families | Didactic course that integrates research into clinical decision making as the context for the assessment and management of complex and chronic problems in family practice across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 638 |
| DNP | 638 | Management of Complex and Chronic Health Problems in Children, Adults, and Families Practicum | Clinical application of theories, concepts, and research related to the management of complex and chronic problems in family practice across the life span for Family Nurse Practitioner role specialty. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Family Nurse Practitioner); Co-requisite: DNP 637 |
| DNP | 640 | Advanced Human Pathophysiology Pediatrics | Didactic course for pediatric nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |

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| DNP | 641 | Advanced Health Assessment Pediatrics | Skills-based advanced health assessment course that includes history-taking strategies and physical, functional, developmental, psychosocial health assessment of children (birth-21). | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 642 | Applied Pharmacotherapeutics for Pediatrics | Applies evidence-based pharmacotherapeutic principles to disease treatment and health promotion and maintenance for pediatric patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner) |
| DNP | 643 | Developmentally Based Care of the Well Child | Offers information for theory-based developmental care of well children. Includes anticipatory guidance for parents and/or children/teens. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 644 |
| DNP | 644 | Well Child Advanced Practicum | Clinical application of theories, concepts and principles as they relate to the developmentally based care of the well child. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 643 |
| DNP | 645 | Management of Common Problems in Pediatric Primary Care | Provides health promotion and disease prevention strategies for the advanced nursing care of all children and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 646 |
| DNP | 646 | Management of Common Problems in Pediatric Primary Care Practicum | Facilitates development of advanced clinical skills in the assessment and management of child health, health surveillance and promotion. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 645 |
| DNP | 647 | Management of Complex and Chronic Health Problems in Pediatric Primary Care | Third pediatric didactic course focuses on assessment and management of childhood complex and chronic health problems and special health conditions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 648 |
| DNP | 648 | Management of Complex & Chronic Problems Pediatric Primary Care Practicum | Clinical course assists students in developing advanced clinical skills in decision making with chronically ill or special needs pediatric patients. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner); Co-requisite: DNP 647 |
| DNP | 650 | Advanced Human Pathophysiology Neonates | Didactic course for neonatal nurse practitioner students focuses on applying concepts of human pathophysiology and genetics in neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 651 | Advanced Health Assessment of Neonates | Skill-based course focuses on advanced health assessment skills, including history-taking strategies and the physical, functional, genetic, developmental, and psychosocial/cultural health assessment of neonates. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 652 | Applied Pharmacotherapeutics for Neonates | Focuses on the application of knowledge of pharmacological principles in the treatment of diseases and promotion of health for neonates and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 653 | Advanced Development and Family Health Promotion: Neonatal Theory I | Concepts, theories, interventions, and research related to the promotion, management, and maintenance of physical, behavioral, and developmental needs of at-risk newborns and infants and their families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 654 |
| DNP | 654 | Neonatal Practicum I | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 653 |
| DNP | 655 | Management of Common Neonatal Problems | Proactive neonatal theory course focusing on the concepts, theories, and research related to acute and chronic health deviations of neonates and infants. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 656 |
| DNP | 656 | Neonatal Practicum II | Clinical application of theories, concepts, and principles in area of concentration. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 655 |
| DNP | 657 | Management of Complex Problems in Neonates | Examines the application of knowledge of complex, multi-system alterations in neonatal health from a theoretical and research perspective in preparation for clinical practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner) |
| DNP | 658 | Neonatal Practicum III: Management of Complex Problems in Neonates | Develops and applies advanced neonatal assessment, clinical decision making, and management skills to complex health alterations in at-risk neonates to include cultural, ethical, legal, and advocacy issues. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner); Co-requisite: DNP 657 |
| DNP | 659 | Embryology and Genetics | Prepares advanced practice nurses to use embryology, genetics, and physiology concepts within the nursing process in the care of pediatric and neonatal patients. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Advanced Nursing Practice (Neonatal, Pediatric or Family Nurse Practitioner) |
| DNP | 660 | Advanced Neuropsychopathology Lifespan | Manifestations of altered neurophysiology and psychopathology over the lifespan. Uses evidence-based support for theoretical views of psychiatric disorders to analyze the relationships of neuropsychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Child and Adolescent Mental Health Intervention or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 671 | Advanced Mental Health Assessment Across the Lifespan | Focuses on comprehensive mental health assessment of psychiatric disorders occurring in children, adolescents, and families. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 672 | Psychopharmacology Across the Lifespan | Focuses on evidence-based use of medications for mental health disorders across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner |
| DNP | 673 | Mental Health Promotion Across the Lifespan | Focuses on evidence-based interventions to promote mental health across the lifespan. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner. Co-requisite: DNP 674 |

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| DNP | 674 | Mental Health Promotion Across the Lifespan Practicum | Clinical experiences to become skilled in assessment and evidence-based individual intervention of mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) Family Psychiatric and Mental Health Nurse Practitioner; Co-requisite: DNP 673 |
| DNP | 675 | Management of Common Mental Health Disorders Across the Lifespan | Emphasizes the assessment and evidence-based management of common mental health disorders across the lifespan. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner Co-requisite: DNP 676 |
| DNP | 676 | Management of Common Mental Health Disorders Across the Lifespan Practicum | Clinical experiences necessary to become skilled in the assessment and evidence-based management of the most common mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner; Co-requisite: DNP 673 |
| DNP | 677 | Management of Complex & Chronic Mental Health Disorders Across the Lifespan | Focuses on modalities of evidence-based treatment with children, adolescents, adults, and families with complex and/or chronic psychopathology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner; Co-requisite: DNP 678 |
| DNP | 678 | Management of Complex & Chronic MH Disorders Across the Lifespan Practicum | Clinical experiences in the assessment and evidence-based management of the most complex and chronic mental health disorders across the lifespan. | N | PRA | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2-6 | | Pre-requisite: DNP Adv Nurse Pract (Family Psych & Mental Health Nurse Practitioner) or (Adult Psych Mental Health Nurse Practitioner) or Family Psychiatric and Mental Health Nurse Practitioner; Co-requisite: DNP 677 |
| DNP | 679 | Biostatistics: Principles of Statistical Inference | Examines principles of statistical inference and their application to the analysis and interpretation of epidemiological, psychosocial, medical, nursing, and healthcare data. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing graduate student |
| DNP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 682 | Geriatric Health Promotion | Examines theoretical perspectives in aging and cultural and contextual approaches for health promotion in older adults. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| DNP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DNP | 703 | Innovation in Communication-Scholarly and Professional Writing | Provides a review of principles of scholarly and professional writing, plagiarism and APA 6th edition format. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisite: Doctor of Nursing Practice major |
| DNP | 704 | Principles of Evidenced-Based Care in Advanced Practice | Foundational course focuses on the evidence-based process and understanding of evidence-based practice principles assist advanced practice nurses and other healthcare professionals in clinical decision making in order to provide best care. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 705 | Healthcare Outcomes Management | Outcomes management methodology supports implementation of evidence-based practice and measurement of both patient and healthcare system outcomes attributed to adoption of best practices. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice student; DNP 704 |
| DNP | 706 | Implementing Sustainable Change toward Evidence-Based Practice | Facilitates student learning about striving for and evaluating sustainable change that hinges on active improvement of practices through implementing evidence-based practice (EBP). Students engage strategies designed to facilitate advanced practice nurses' leadership of this change. Students analyze the success of their evidence-based applied clinical project that is implemented in their clinical residency course. Students evaluate the impact of their doctorally prepared evidence-based advanced practice nurse role on shifting culture to best practice. Students explore the use of adult learning, ethical, and mentorship principles to facilitate understanding of EBP in their workplace. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice major; DNP 704; DNP 705; Co-requisite: DNP 712 |

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| DNP | 707 | Disseminating Evidence to Advance Best Practice in Healthcare and Health Policy | Focuses on methods for dissemination of evidence to advance best practice within local, regional, and/or national settings, as well as advancement of EBP in health policy and the media. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Doctor of Nursing Practice major; DNP 704, 705 or 706. Corequisite(s): DNP 712 |
| DNP | 708 | Systems Thinking in a Complex Healthcare Environment | Studies basic and advanced systems principles as they relate innovation to the American healthcare system. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 709 | Individual and Innovation Leadership in Healthcare Practice | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 710 | Innovation in Communication and Information Systems in Nursing and Health | Examines principles of effective communication and information systems with a focus on evaluating and using emerging technologies as they relate to nursing and health care. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Doctor of Nursing Practice major |
| DNP | 711 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy with emphasis on strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Doctor of Nursing Practice student |
| DNP | 712 | Clinical Residency and Management | Demonstrates DNP competencies through portfolio documentation of clinical learning experiences and implementation of the DNP Evidence-Based Clinical Applied Project. Doctoral students submit the DNP Portfolio in partial fulfillment of the degree. | N | PRA | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Doctor of Nursing Practice student |
| DNP | 713 | Analysis of Organizational Cultures in Healthcare | Analyzes culture, organizational implications and relationships to change and innovation in healthcare. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 714 | Professional Relationships in Healthcare | Analyzes professional relationships within healthcare organizations and evidence-based strategies to improve communication, coordination, and collaboration. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 715 | Dynamics and Principles of Information in Healthcare | Analyzes and applies multiple sources of information for healthcare leaders across the continuum of evidence including research, evidence-based practice, translational research, improvement science, and quality improvement. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Advanced Nursing Practice (Innovation Leadership) major |
| DNP | 716 | Leadership of Innovation in Healthcare | Analyzes leadership theories in the creation of complex healthcare system innovation. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisite: Doctor of Nursing Practice concentrations major |
| DNP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 100 | ASU Design Experience | Covers ASU's mission as the New American University, the importance and benefits of an entrepreneurial approach to problem solving, solutions to sustainability challenges, and the importance of social embeddedness. Additionally, through various course discussions and assignments, students examine the concept of academic integrity and its potential impact on their future, gain awareness of the value of engaging in research activities, and learn about taking an interdisciplinary perspective. | N | REC | N | GNA | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): BS, BSD or BSLA Design School major. Credit is allowed for only DSC 100 or 194 (ASU Design Experience) |
| DSC | 101 | Design Awareness | Surveys cultural, global, and historical context for the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & G | |
| DSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| DSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 236 | Introduction to Computer Modeling | Computers in design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Pre-requisite: Industrial Design student; Passed Milestone |
| DSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| DSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| DSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| DSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| DSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| DSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |

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| DSC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design or PhD in Environmental Design & Planning student |
| DSC | 501 | Qualitative Research in Design | Theory and application of qualitative research. Emphasizes using ethnography to identify and specify innovative concepts and strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Master of Industrial Design or Master of Science in Design major |
| DSC | 520 | Contemporary Design Issues | Issues influencing contemporary design such as sustainability, globalization, education, gender, collaboration and emotion. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 558 | Daylighting | Daylighting as a design determinant; concepts, techniques, methodology, experiments, and case studies. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Herberger Institute of Design and the Arts graduate student |
| DSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Master of Science in Design student |
| DSC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD or Design (Inter Design) MSD student |
| DSC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Master of Industrial Design, Master of Interior Architecture, Master of Science in Design, or Master of Visual Communication Design major |
| DSC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Design (Graphic Design) MSD, Design (Indus Design) MSD, or Design (Inter Design) MSD student |
| DSC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| DSC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EAC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| ECD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECD | 211 | The Developing Child: Theory into Practice, Prenatal-Grade 3 | Examines process of physical, social, emotional, cognitive, language, and literacy development of young children; includes observation, practical application, fieldwork. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |

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| ECD | 220 | Introduction to Nutrition, Health and Safety | Emphasizes providing proper nutrition, promoting a safe but challenging learning environment, and becoming knowledgeable of a child's health status. Also covers practical applications for assisting young children to develop good habits and attitudes and to assume lifelong responsibility for their own well-being. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| ECD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 302 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 312 | Social/Emotional Foundations of Learning | Foundations of early social development and evidence-based practices for promoting social-emotional development; young children's understanding, interactions, and relationships to the social world. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 313 | Technology in Early Childhood Education | Evaluates technology and technological learning tools for early childhood classrooms; integrates technology and its tools into students' learning. Lecture, discussion, active participation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 315 | Classroom Organization and Guidance of Young Children | Theories and strategies to guide children's development toward becoming self governing; typical and atypical behaviors; implementing age-appropriate classroom management techniques that foster individual, social, and academic competence. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 316 | Teacher Research: Studying Children in Context | Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 321 | Emerging Language and Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 323 | Building Home, School, and Community Partnerships | Knowledge and skills to facilitate positive and continuous family-school partnerships; family background, social context, family involvement, and current research on family-school interaction and academic success. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 324 | Social Studies and Creative Arts Curriculum, Instruction and Assessment | Social studies and creative arts standards, curriculum, and instructional and assessment strategies in an integrated social studies and creative expression curriculum for children birth through grade 3. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 341 | Administration/Evaluation of EC Programs | Administration and evaluation of early childhood programs. Emphasizes planning and evaluation; regulations; health, nutrition, and safety; operations, budgeting, and supervision of personnel. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 396 | Clinical Experience: K-3 Setting | Provides opportunities to engage as a teacher and learner in a K-3 classroom. Emphasizes focused observation; co-planning with a placement teacher and co-teaching lesson to whole groups, small groups, and individual students. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| ECD | 397 | Clinical Experience: Preschool | Instruction, observation, and management of small groups and the whole class. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 406 | Assessment: Birth-Grade 3 | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 416 | Social and Educational Policies Affecting Children and Families | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links between policy, educational practice, schools, and family functioning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 418 | Instructional Methods for Young Children: Integrating Digital Media | Develops integrated experiences with children's literature for facilitating development in reading, writing, speaking, and listening. Further develops educational strategies for promoting growth in the social studies and creative arts curriculum, and instructional/assessment strategies for preprimary- and primary-level children; developmentally appropriate methods and strategies for effective instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECD | 477 | Student Teaching: Birth to Pre-K | Supervised practicum in a birth to pre-K program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 4-6 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 478 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-9 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ECD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECD | 496 | Field Experience | Instruction and management of small groups and substantial work with the whole class. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| ECD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECD | 503 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only COE 501 or ECD 503 or PPE 501 or SPE 501 or TEL 501 |
| ECD | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 505 | Foundations of Early Childhood Education | Foundational basis of the early childhood field, including historical roots, current practices, ethics, models of teaching, and application in early childhood settings. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 520 | Child Guidance and Management: Child, Family, Community, and Culture | Introductory exploration of a variety of techniques for developing a positive classroom environment. Includes overview of several classroom and school management programs and possible effects of implementation. Focuses on observations made during the students' classroom and field experiences. Provides the catalyst for introducing students to the program's professional portfolio requirement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 527 | Mathematics in Early Childhood Education | Theory and practice in the use of manipulative materials for teaching mathematics to preschool and primary grade children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 541 | Assessment of Young Children | Assessment principles, techniques, and issues related to guiding learning for children birth through eight years. Test construction, interpretation and communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 549 | Foundations of Diversity, Human Development, and the Young Child | Historical foundations and theories of child development as examined with a concern for diversity, multidirectional human change, and cultural embeddedness. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 565 | Appropriate Instructional Methodologies for Young Children | Surveys appropriate teaching methodologies for young children across the curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| ECD | 570 | Pre-K Internship | Field experience working with children between the ages of birth-age 4. Required for Arizona Dept. of Education Early Childhood Endorsement and Certification. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 0-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 571 | Pre-K Student Teaching | Supervised student teaching in which a student works with children between the ages of birth to age 4. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 4 | | Pre-requisite: Graduate student |
| ECD | 578 | Student Teaching in Early Childhood (K-3) | Supervised teaching in the K-3 classroom setting. Synthesized experience in curriculum, instruction, classroom organization, and guidance of young children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| ECD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student |
| ECD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| ECD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| ECN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| ECN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| ECN | 211 | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECN | 211 | Macroeconomic Principles | Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 212 | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| ECN | 212 | Microeconomic Principles | Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | |
| ECN | 213 | Honors Macroeconomics | Introduces modern macroeconomic analysis. Theory of national income, unemployment, inflation, and economic growth and its application to economic policy. Not open to students with credit in ECN 313. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 210, 211, 270 or 271 with C or better |
| ECN | 214 | Honors Microeconomics | Introduces modern microeconomic analysis. Theories of consumer behavior, production, and cost. Output and price determination in a variety of market settings. Not open to students with credit in ECN 314. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 221 | Business Statistics | Methods of statistical description. Applies probability theory and statistical inference in business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | CS | Prerequisite(s): MAT 211 or 271 with C or better |
| ECN | 231 | Honors Business Statistics | Applies statistical methods used in business and economic modeling and research. Emphasizes regression analysis and modeling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | CS | Pre-requisites: Barrett Honors student; MAT 211 or 271 with C or better |
| ECN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: Barrett Honors student; Pre/Co-requisite: MAT 210, 211, 270, 271 or 272 with C or better if completed |
| ECN | 303 | Honors Managerial Economics | Develops a basic platform for managerial decision making. Applies basic economic concepts and models to actual business practices. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 214 or 312/314 with C or better |
| ECN | 306 | Survey of International Economics | Surveys international trade issues, commercial policy, trade theory, customs unions, and international monetary topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |
| ECN | 312 | Intermediate Microeconomic Theory | Role of the price system in organizing economic activity under varying degrees of competition. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisite(s): ECN 211 or 213 with C or better; ECN 212 or 214 with C or better; MAT 211, 266 or 271 with C or better |
| ECN | 313 | Intermediate Macroeconomic Theory | Determinants of aggregate levels of employment, output, and income of an economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or ECN 312/314 with C or better. |
| ECN | 315 | Money & Banking | Functions of money. Monetary systems, credit functions, banking practices, and central banking policy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 331 | Economics of the European Economic Union | Examines broad economic policies seeking to influence individuals' decisions, the history of European economic development and policies, as well as institutions and social systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 335 | South Asia and the World Economy | Develops and discusses alternative theories of trade, development, and growth in the context of south Asia and the world economy. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better |

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| ECN | 345 | Survey of Environmental and Resource Economics | Economic principles applied to private and public policy decisions involving environmental resources, natural resource management, and policy analyses. Focuses on how economic methods can contribute to making better environmental decisions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 211 or 213; ECN 212 or 214; MAT 211 or 271 with C or better. |
| ECN | 355 | Economics of Healthcare | Uses economic tools and models to discuss and evaluate the American healthcare system. Applies standard concepts in microeconomics, macroeconomics, and public choice economics to the study of the evolution and the current state of the healthcare system and to the study of proposals for change. Focuses on the promise and problems of using economic tools in a historical, ethical, and cultural context to understand the current healthcare system. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisites: ECN 211 or 213; ECN 212 or 214 and MAT 211 or 271 with C or better. |
| ECN | 360 | Economic Development | Theories of economic growth and development. Role of capital formation, technological innovation, population, and resource development in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 365 | Economics of Russia and Eastern Europe | Origins and analysis of contemporary institutions. Comparative development and differentiation in the 20th century. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 382 | Managerial Economics | Applies economic analysis to managerial decision making. Market analysis in the context of the socio-legal environment. Does not satisfy Economics major requirements. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Not open to Economics or Business majors. Minimum 2.0 ASU cumulative GPA and minimum of 56 total earned hours OR Non-degree student with minimum 2.0 ASU cum GPA OR Graduate student |
| ECN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: ECN 211 or 213, ECN 212 or 214, and MAT 211 or 271 with C or better |
| ECN | 404 | History of Economic Thought | Development of economic doctrines, theories of mercantilism, physiocracy, classicism, neoclassicism, Marxism, and contemporary economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-requisites: ECN 214 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 410 | Applied Regression Analysis and Forecasting | Applies regression techniques to forecasting in business and institutional environments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 413 | Advanced Honors Macroeconomics | Develops and uses various macroeconomic models to evaluate important economic policies. Emphasizes honing students' policy evaluation skills. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 414 | Advanced Honors Microeconomics | Develops and uses various microeconomic models to evaluate important economic issues. Emphasizes the economics of uncertainty and information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: Barrett Honors student; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 416 | Game Theory and Economic Behavior | Introduces game theory and its application to various economic situations under conditions of complete and incomplete information. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 421 | Labor Economics | Labor supply and demand, unemployment, determinants of wages, earnings inequality, labor unions and the structure of labor contracts. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Prerequisites: ECN 214 or 312 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 423 | Economics of Education | Focuses on educational decisions, including individual choices, institutional strategies and government policies. Topics include measuring the costs and returns of education, the relationship between education and inequality, and the role of K-12 and postsecondary institutions in economic growth. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 or 312 with C or better; Pre- or corequisite(s): ECN 213 or 313; Credit is allowed for only ECN 423 or 494 (Economics of Education) |
| ECN | 425 | Introduction to Econometrics | Elements of regression analysis: estimation, hypothesis tests, prediction. Emphasizes use of econometric results in assessment of economic theories. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 221 (or ECN 231 or IEE 380 or STP 226) with C or better; ECN 214 or ECN 312 with C or better |
| ECN | 436 | International Trade Theory | Comparative-advantage doctrine, including practices under varying commercial policy approaches. Economic impact of international disequilibrium. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 438 | International Monetary Economics | History, theory, and policy of international monetary economics. Balance of payments and exchange rates. International financial markets, including Eurocurrency markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB & G | Prerequisite(s): ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 441 | Public Economics | Public goods, externalities, voting models, public expenditures, taxation, and budget formation with emphasis on the federal government. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | SB | Pre-reqs: ECN 214 or ECN 312/314 with C or greater; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 445 | Environmental Economics | Advanced topics in environmental economics with quantitative methods for developing information that is used for environmental policy making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 214 or 312 or 314 with C or better; Pre/Co-requisite: ECN 213 or 313. |
| ECN | 450 | Law and Economics | Economics of the legal system, including analysis of property, contracts, torts, commercial law, and other topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 453 | Industrial Organization and Competition Policy | Development of public policies toward business. Antitrust activity. Economic effects of government policies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |
| ECN | 455 | Health Economics | Focuses on health care decisions, including individual and government policies. Topics include demand for and supply of health care, payment for health care, the impact of health care reform and the techniques economists use to evaluate health care interventions. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): ECN 214 (or ECN 312) with C or better. Pre- or corequisite(s): ECN 213 (or ECN 313); Credit is allowed for only ECN 455 or 494 (Health Economics) |
| ECN | 470 | Mathematical Economics | Integrates economic analysis and mathematical methods into a comprehensive body of knowledge within contemporary economic theory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better |

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| ECN | 475 | Capstone in Economics | Capstone course integrating several areas of economics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 3 | L | Pre-reqs: ECN 213 or 313 with C or better; ECN 214 or ECN 312/314 with C or better; Senior standing. |
| ECN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Minimum 3.0 ASU cum GPA; ECN 213 or 313 with C or better; ECN 214 or 312/314 with C or better |
| ECN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Pre-requisites: Barrett Honors W. P. Carey undergraduate student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Pre-requisites: Barrett Honors W. P. Carey BS or BA student; ECN 213 or 313 with C or better; ECN 214 or 314 with C or better |
| ECN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-reqs: ECN 214 or ECN 312/314 with C or better; Pre/Co-requisite: ECN 213 or 313 |
| ECN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | GNA | W.P. Carey School of Business | Department of Economics | 1-7 | L | Pre-requisites: ECN 313 and 314 with C or better |
| ECN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| ECN | 501 | Statistics for Managers | Fundamentals of statistical analysis to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 502 | Managerial Economics | Applies microeconomic analysis to managerial decision making in areas of demand, production, cost, and pricing. Evaluates competitive strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 503 | Global Business Environment | Macroeconomic analysis of issues related to economic growth, inflation, interest rates behavior, unemployment, exchange rate determination, and global competitiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: MBA degree program student |
| ECN | 510 | Microeconomic Theory and Applications | Applies economic theory to production, consumer demand, exchange, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 2-4 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 525 | Applied Regression Models | Simple linear regression, multiple regression, indicator variables, and logistic regression. Emphasizes business and economic applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 527 | Categorical Data Analysis | Discrete data analysis in business research. Multidimensional contingency tables and other discrete models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: ECN 525 |
| ECN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 712 and 714 with C or better |
| ECN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ECN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 711 | Macroeconomic Analysis I | Current theories of output, employment, inflation, and asset prices as well as major aggregates. Introduces dynamic optimization techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 712 | Microeconomic Analysis I | Theory of production, consumer demand, resource use, and pricing in a market economy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 713 | Macroeconomic Analysis II | Focuses on growth theory, dynamic general equilibrium models, monetary theory, open-economy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 714 | Microeconomic Analysis II | General equilibrium, welfare economics, production, and capital theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 715 | Advanced Macroeconomic Analysis | Focuses on current research areas in macroeconomics and monetary theory with emphasis on methods in economic dynamics and numerical techniques. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 with C or better; ECN 713 with C+ or better |
| ECN | 716 | Advanced Economic Theory I | Economic behavior under uncertainty; markets and contracts under asymmetric information; the theory of games with incomplete information and applications. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 714 with C or better; ECN 712 with C+ or better |
| ECN | 717 | International Macroeconomics | Intertemporal approach to the current account, international business cycles, international risksharing and home bias, models of exchange rate determination, balance of payment crises, sovereign debt and default. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 721 | Labor Economics I | Develops basic theoretical models for analyzing labor market issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 722 | Labor Economics II | Extensions/criticisms of labor market theories. Applications to a variety of policy issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 721 with C or better |
| ECN | 725 | Econometrics I | Problems in the formulation of econometric models. Emphasizes estimation, hypothesis testing, and forecast of general linear models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 726 | Econometrics II | Estimation and inference of qualitative and limited dependent variable models as well as general multiple equation models. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 725 with C+ or better |
| ECN | 727 | Quantitative Methods in Economics | Generalized method of moment estimation, estimation with censored and truncated samples, nonlinear models, panel-data models, econometrics of nonstationarities. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 and 712 with C+ or better |
| ECN | 736 | International Trade Theory | Theories of comparative advantage and their empirical verification. Theory and political economy of commercial policy. Resource transfers and the role of the multinational corporation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 741 | Public Economics | Economics of collective action, public spending, taxation, and politics. Impact of central governmental activity on resource allocation and income distribution. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey Graduate degree-seeking students only; ECN 712 with B or better; Co-requisite: ECN 714 |
| ECN | 753 | Industrial Organization | Analyzes structure, conduct, and performance in industrial markets; the economics of organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 713 and 714 with C or better |
| ECN | 760 | Economics of Growth and Development | Economic problems, issues, and policy decisions facing the developing nations of the world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student; ECN 711 and 712 with C+ or better; Co-requisite: ECN 713 and 714 |
| ECN | 770 | Mathematics for Economists | Surveys mathematical ideas encountered in economics and econometrics. Topics include measure theory, probability theory, and mathematical statistics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: W.P. Carey degree seeking graduate student |
| ECN | 784 | Internship | | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey degree seeking graduate student |

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| ECN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ECS | 310 | Foundations in Typical / Atypical Child Development | Examines the process of typical and atypical physical, social, emotional, cognitive, and language development of young children with or at risk for delay. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| ECS | 312 | Social and Emotional Development of the Young Child | Examines genetic, environmental and biological influences on typical and atypical social and emotional developmental processes through current research, current issues, as well as connections to practice. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | Prerequisite(s): minimum junior standing |
| ECS | 315 | Classroom Organization and Child Guidance | Develops and implements analysis, intervention, and consultation strategies for effective management of classroom behavior for students with and without disabilities. Age-appropriate techniques addressing individual, social, and academic competence. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| ECS | 316 | Assessment/Evidence-based Practice | Examines assessments appropriate to birth - grade 3 instruction to align curriculum with learner needs. Focuses on test design, interpretation, lesson design, and aspects related to multiple classroom and formal assessments. Introduces designing, conducting, interpreting, and reporting teacher research; methods of research and fieldwork with children to improve teaching practices and child outcomes. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| ECS | 321 | Communication, Language Development, and Emergent Literacy | Language and literacy development; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical observation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| ECS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| ECS | 397 | Practicum in Inclusive Birth-Age 5 Early Childhood Setting | Provides opportunities for students to engage as a teacher and learner in an inclusive birth to age 5 early childhood setting. Emphasizes focused observation, co-planning with a placement teacher, and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2-4 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 411 | Instructional Methodologies for Young Children: STEM | Explores, applies and integrates STEM (Science, Technology, Engineering and Math) content, project-enhanced instructional strategies and assessments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 412 | Mathematics Curriculum, Instruction and Assessment | Focuses on math content, methods, skills, and attitudes to be considered in teaching young children. Examines the theoretical foundation for young children's inquiry and learning. Methods focus on practical application of theory in classroom practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 413 | Literacy Curriculum, Instruction and Assessment | Extends ECD 321; language and literacy development in K-3 classrooms; language acquisition; methods of facilitating oral language in relation to emergent reading and writing; methods of facilitating early literacy development; clinical experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| ECS | 420 | Evaluation and Intervention Strategies for Infants, Toddlers and Preschoolers with Disabilities | Students will learn to screen, assess and provide services to young children with special needs using norm-referenced, criterion-referenced, and formative assessments to determine special education eligibility, plan individualized family service programs, and monitor progress for eligible students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| ECS | 430 | Systems, Policy, and Advocacy in Early Childhood/Special Education | Social policies at the national and state levels; values and assumptions of policies; political factors shaping policy and implementation; links among policy, educational practice, schools, and family functioning that have a direct impact on both typical and special needs children in early childhood programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 431 | Family, Community and Professional Support Systems | Covers methods and issues in cooperative teaching for special education students in general education classrooms, with an emphasis on collaborative communication skills for working with a variety of school professionals and families. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program OR enrolled in Educational Studies program OR enrolled in Early Childhood minor |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ECS | 478 | Student Teaching K-3 Special Education | Student teaching in an inclusive birth to age 5 early childhood special education setting. Synthesizes experience in curriculum, instruction, and classroom management. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-6 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| ECS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| ECS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| ECT | 479 | Capstone Seminar in ECT | Reflective, experience-based integration of theory and practice; professional development for preschool through grade 3 teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Progression into upper division Professional Teacher Preparation Program (PTPP) courses |
| EDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDA | 501 | Competency/Performance in Educational Administration | Nature of educational administration and the concept of competency as it applies to educational administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 511 | School Law | Interpreting state and federal law and policy in school settings. Includes statutory authority for administrators, liability, constitutional rights, law, and ethics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 514 | Leadership in Curriculum and Assessment | Curriculum and assessment responsibilities of school administrators. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 526 | Instructional Supervision | Administering curriculum improvement, in-service education, evaluating, and improving teaching competence; administrative instructional responsibilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 548 | School, Family, and Community Connections | Administrative factors of primary importance in developing community involvement in public schools. Emphasizes theory and skill of school system and individual communication. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 572 | School Finance and Human Resources | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and school financial affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 578 | Critical Issues in Educational Leadership | Explores current critical issues in school leadership, including student support and relationships with governmental agencies and the community. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 611 | Educational Policy and the Law | Emphasizes policy analysis and application of federal and state law to policy evaluation and development in public schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 634 | Instructional Leadership | Theory, practice, and issues in school change and reform with a focus on leading change efforts at the school site. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 676 | The School Superintendency | Critical examination of the school superintendency and the primary functions of this educational position. Includes the duties, responsibilities, activities, and problems of the school superintendent. Examines the unique leadership role of the school superintendent. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 679 | Administration of Special Programs in Education | For personnel administering special education and federal programs; responsibilities of principals, supervisors, counselors, and directors for special education and federally funded programs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 685 | Education in Global Contexts | Global perspectives on education in contemporary society with emphasis on social, political, and economic factors that affect access and equity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-6 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EDA | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 772 | School District Human Resources and Business Management | Effective ethical models and strategies for organizing and administering the conduct of school site human resources administration and business affairs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 773 | The Superintendency and School District Leadership Roles and Responsibilities | Examines management roles and responsibilities of public school district superintendents and other leaders in identifying and addressing critical issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 302 | Assessment and Evaluation in Education | Applies assessment and evaluation principles to education contexts, using a case format. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| EDP | 310 | Educational Psychology for Non-Teachers | Human behavior in educational situations. Individual differences, factors affecting learning, behavioral and cognitive learning, motivation, testing, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | SB | |
| EDP | 311 | Educational Psychology for Future Teachers | Planning and conducting effective instruction based on learning theories and principles. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | SB | Prerequisite(s): Teachers College major, minor or certificate student |
| EDP | 313 | Childhood and Adolescence | Principles underlying total development of pre- and early-adolescent children. Emphasizes physical, intellectual, social, and emotional development with practical implications for teachers. Meets ADE requirement for one course in early adolescent psychology for middle grade endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| EDP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 454 | Statistical Data Analysis in Education | Role of data analysis in research and decision making. Elements of exploratory data analysis, descriptive indexes, and statistical inference. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | |
| EDP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| EDP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EDP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| EDP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| EDP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDP | 502 | Introduction to Data Analysis | Descriptive statistics, visual approaches, estimation, and inferential methods for univariate and bivariate educational research problems. Experience using statistical software. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 503 | Introduction to Qualitative Research | Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 514 | Psychology of the Adolescent | Cognitive, physical, and social development of adolescents in contemporary society. Impact of family, school, and workplace on adolescent development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 523 | Educational Assessment | Increases teachers' and others' competence in classroom assessment, grading, and testing. Emphasizes integration of curriculum, instruction, and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 529 | Lifespan Human Development | Issues and models of human development as it occurs across the lifespan. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 530 | Theoretical Issues and Research in Human Development | Psychological theories, research, and methods relevant to human development, emphasizing the relations between early development and later performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 536 | Physiology of Behavioral Disorders | Critical study of nervous system, brain function for fundamental behaviors, and system dysfunctions in mental/neurological disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 540 | Theoretical Views of Learning | Classical and cognitive theories of learning, plus recent orientations. Illustrative experimental and rational foundations; implications for educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student or undergraduate postbaccalaureate student; Credit is allowed for only EDP 540 or LSE 540 |
| EDP | 541 | Motivating Students to Learn | Examines multiple perspectives on motivation and the management of learning environments as bases for reflecting on educational practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 552 | Multiple Regression and Correlation Methods | Educational applications of regression techniques. Quantitative and qualitative predictors, curvilinear trends, and interactions. Emphasizes analyzing data and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 554 | Analysis-of-Variance Methods | Educational applications of ANOVA techniques. Between- and within-subjects designs, multiple comparisons. Emphasizes using statistical software and interpreting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 563 | Consultation and Supervision | Examines consultation and supervision research relevant to school psychology practice. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 566 | Advanced Psychoeducational Practice | Develops advanced knowledge and skills in psychoeducational assessment and intervention with an emphasis on case conceptualization and evidence-based methods. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDP 560 and 562 with B or better |
| EDP | 567 | School Psychological Services for Diverse Populations | Examines historical, legal, ethical, and practical issues involved in the delivery of school psychological services to diverse populations. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 568 | Psychological Assessment and Intervention | Skills-building course emphasizing interventions, assessment, and outcome-based educational decisions for students experiencing emotional and/or behavioral difficulties. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| EDP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 597 | Applied Research and Reflection | The dual purpose of the project is to synthesize learning from multiple areas of scholarship on teaching and learning, and to reflect on the content and process of the master's degree program. Culminating product includes a reflective paper with a corresponding project, such as a literature review, curricular model, technology product, or other project as agreed upon by the student and the student's advisor. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 651 | Methods and Practices of Qualitative Research | Advanced course for students familiar with theory and extant work. Topics include data collection, analysis, reporting, and an extensive fieldwork project. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: COE 503 with C or better |
| EDP | 652 | Multivariate Procedures for Data Analysis | Educational applications of multivariate methods, including MANOVA, discriminant analysis, and exploratory factor analysis. Emphasizes analyzing data and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 654 | Structural Equation Modeling in Educational Research | Educational applications of confirmatory factor analysis, path analysis, and full latent variable models. Experience in conducting analyses and reporting results. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EDP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | Pre-requisites: Freshman standing, Maximum 25 hours |
| EDS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 200 | Design Literacy and Communication | Builds the requisite skills for students to be able to express their ideas visually. Gives exercises to create an understanding of basic principles of design as well as design communication, principles of composition and aesthetic evaluation. Uses tools such as sketching, drawing, computer graphics and model making as a vehicle to develop an understanding of visual methods of expressing one's self. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or The Arts (Fashion Design) major |
| EDS | 201 | Fundamentals of Sustainability in Design | Explores sustainability as it relates to the key disciplines that comprise environmental design. Topics range from the development of earth-friendly materials used by interior designers and product designers to the design of sustainable buildings by architects through the use of appropriate materials and requisite energy efficiencies. Surveys the literature of sustainability, identifying critical issues on the subject today. Explores the theoretical underpinnings of the sustainability movement as it affects environmental design and related disciplines. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 223 | Design Thinking | Introduces the notion of design thinking, a concept that is gaining significant recognition in several disciplines including art, design, business, engineering and others. Design thinking can be described as a creative, multidisciplinary, human-centered approach to solving complex problems. Contemporary society faces numerous challenges, and the need for new tools and methods to tackle and solve these problems is more pressing than ever before. Offers several new techniques of design thinking and creative problem solving through engaging lectures and exciting projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | |
| EDS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

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| EDS | 301 | Contemporary Issues in Design Strategies and Innovation | Covers theories and methods needed in design, innovation and management of environmental design projects. Uses best practices and case studies related to the design of artifacts and to the design of built environments as a vehicle to develop students' understanding of different aspects of environmental design in a real-world setting. Also discusses the impact of contemporary issues such as globalization, digital tools, global connectivity on the theories and practice of environmental design. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre- or corequisite(s): EDS 200 |
| EDS | 302 | Design Inquiry and Undergraduate Research | Theories and methods of design inquiry within a research environment. Prepares students for the senior-year synthesis courses. Students take on design-related research and develop and write a proposal for an integrative experience/project for an environmental design intervention and make an implementation plan to realize this intervention. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 301 |
| EDS | 394 | Special Topics | | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 401 | Environmental Design Synthesis I | First of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students identify a relevant research problem in environmental design and undertake the necessary literature search and reading regarding theories and methods related to the selected research question. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 302 |
| EDS | 402 | Environmental Design Synthesis II | Second of a two-semester sequence of synthesis courses intended to be integrative, based on design research and inquiry. Serves as a culminating experience where, through the successful completion of an environmental design research project/application or experience, students demonstrate their understanding and synthesis of the knowledge and skills they have acquired in the program. Students implement the research study identified in the first semester of the two-semester sequence. Emphasizes the use of visual methods as a method of inquiry and research. | N | RSC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: EDS 401 |
| EDS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| EDS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| EDS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | L | |
| EDS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| EDT | 180 | Technology Literacy: Problem Solving using Digital Technology Applications | Introducing digital technologies and their place in society. Applies 21st-century skills to problem solving using digital technology applications including spreadsheets and databases. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 184 | Modeling, Inquiry, & Analysis Using Technology Tools | Project-based course as an overview of modeling, simulation, statistics, probability, and the role of technology in education, business and personal. Investigates exploration and presentation of emerging technology along with their acquisition, use, and implementation into society. Course includes the use of software programs and online simulations for scientific investigation, internet research, data collection, visual representation of data, probability, measures of central tendency, Action Research, 3D modeling, and Web page design. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |

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| EDT | 210 | Games, Technology and Society | Introduces the role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 220 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| EDT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 310 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| EDT | 321 | Computer Literacy: Mobile Technologies and Your World | Uses mobile technologies across disciplines for communication, collaboration, creativity and problem solving. Employs digital tools including Microsoft Office's spreadsheets and databases, Google apps, mobile apps, and a variety of other Web-based tools in problem-based environments. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | CS | Pre-requisite: Minimum 45 hours; Credit is allowed for only EDT 180 or EDT 321 |
| EDT | 329 | Games, Simulations, and Virtual Environments | Focuses on the use of Gaming, Simulations, and Virtual Environments (GS/VE) in education and instruction. Examines how educational professionals and other practitioners can leverage students interests in digital culture to accelerate their learning. Participants explore the foundational, social, and cultural implications of these new media and the power they hold to engage learners in new ways. Discusses historical overview of GS/VE with an emphasis on educational applications. Analyzes the distinctive features of GS/VE from different pedagogical, psychological (cognitive/emotional), social, and entertainment perspectives. Participants learn how to analyze the design of games, simulations, and virtual environments, creating evaluative criteria for the selection of products in educational environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| EDT | 340 | Designing Games for Impact | Introduces concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| EDT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 440 | Creating and Marketing Mobile Apps | Focuses on conceptualizing, creating and marketing of apps for mobile devices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only EDT 440 or EDT 494 (Creating and Marketing Mobile Apps) |
| EDT | 460 | Games, Technology and Society | Education, healthcare and social activism. Explores general theories about the relationship between technology and society using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. Students play and analyze existing impact games as well as conduct a landscape analysis for an impact game on a topic of their own choosing. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only EDT 460 or 560 |
| EDT | 461 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |

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| EDT | 462 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| EDT | 463 | Games for Impact: The Full Life Cycle | Presents an impact game publishing methodology covering the full life cycle and key considerations for impact game design, development and publishing as well as the unique challenges in making games for impact. Applies methodology to examine an existing impact game currently in development. Students collaboratively workshop an original impact game concept and publishing plan that harnesses the power of games to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing. Credit is allowed for only EDT 463 or EDT 563 |
| EDT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EDT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | IND | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| EDT | 501 | Foundations and Issues in Educational Technology | Introduces educational technology. Examines accomplishments and issues in the field. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 502 | Design and Development of Instruction | Design, development, and formative evaluation of objectives-based instructional materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 503 | Instructional Media Design | Uses media selection, design, and production principles to prepare design specifications for solutions to instructional messages and products. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 504 | Development of Computer-Based Instruction | Systematic design, development, and formative evaluation of computer-based instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 506 | Educational Evaluation | Procedures for evaluating educational programs, training systems, and new-technology applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 507 | Trends in Performance Improvement | Introduces the field of human performance technology. Emphasizes the analysis of performance problems, their causes, and interventions. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 with B or better |
| EDT | 523 | Distance Education Theory and Practice | Explores development of distance learning principles by examining national and international systems and applications. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 524 | Principles and Issues in K-12 Online Learning | Examines current issues, policies, and trends pertaining to K-12 Web-based teaching and learning. Actively explores research related to online learning, with a focus on virtual schooling and emerging best practices for effective online instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Practicing or licensed K-12 teacher |
| EDT | 530 | Technology Integration Methods across the Curriculum | Examines a constructivist approach to technology in education. Investigates technology as a catalyst for rethinking instructional goals and practices. | Y | LEL | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 540 | Creating and Marketing Mobile Apps | Focuses on conceptualizing, creating and marketing of apps for mobile devices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EDT 494 (Concept, creating & mktg APPS), 540 or 594 (Concept, creating & mktg APPS) |
| EDT | 545 | Using the Internet in Education | Explores the Internet as an educational tool for research, inquiry-based learning, and online learning communities. Incorporates constructivist theory. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 560 | Games, Technology and Society | The role and significance of digital games in society and the process of designing games for impact in areas such as education, healthcare and social activism. Explores general theories about the relationship between technology and society, using games as examples, as well as develops a better understanding of methods that take a systemic, contextualized approach to designing games for impact. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 460 or EDT 560 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EDT | 561 | Understanding Games for Impact | Explores the nature of learning in and around games designed for entertainment as well as games designed intentionally for impact. Students gain familiarity with current research on course topics; develop a language for reflection on the cognitive, sociocultural and educational merits and drawbacks of game-centered learning environments; and gain new insights into the ways in which digital playspaces and pastimes shape how people think and learn. Develops the ability to analyze learning in games and game-related social contexts, using different theoretical perspectives and tools. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 562 | Designing Games for Impact | Concepts, methods, techniques and issues associated with designing interactive, game-centered experiences that are developed through a lens of impact. As a cumulative project, students create and test a digital game or game-based experience that demonstrates understanding of impact models and learning science principles. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 461 or EDT 561 |
| EDT | 563 | Games for Impact: The Full Life Cycle | Focuses on the complete life cycle of impact games, from perceived need through design to evaluating impact. Highlights ethics of game-based learning, unintended consequences of impact interventions, and how to involve stakeholders in the design process. Students collaboratively workshop an original impact game concept and publishing plan to address a key 21st-century challenge. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only EDT 463 or EDT 563 |
| EDT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EDT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 701 | Research in Educational Technology | Review and analysis of research studies in educational technology. Methodology for designing, conducting, and reporting educational technology research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 501 and 502 with C or better |
| EDT | 704 | Emerging Technologies in Education | Examines the role and impact of emerging technologies in education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only EDT 591 (Emerging Technologies in Education) or 704 |
| EDT | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: EDT 502 with C or better |
| EDT | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisites: Accepted in either the MED in EDTCH, PHD in EDTECH, or the certificate in EDTECH programs |
| EDT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: EDT 501, 502, and 503 with C or better |
| EDT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EDT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisites: EDT 701 with C or better |
| EDT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EDT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 309 | Environmental Education Project | Covers topics in environmental education that assist students with being able to learn about and investigate their environment in order to make intelligent and informed decisions. | Y | LEL | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only EED 309 or EED 494 (Project Wild Aquatic) or EED 494 (Project Wet) |
| EED | 324 | Social Studies in Elementary Schools | Social studies education standards, curriculum, and instructional and assessment strategies for all children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 396 | Clinical Experience I | Develops knowledge and skills for effective lesson planning. Introduces the TAP instructional rubric, the college professionalism rubric, backwards design of a direct instruction lesson plan, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 397 | Clinical Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 or SPE 396; Admission to Professional Teacher Preparation Program |

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| EED | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| EED | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| EED | 433 | Language Method Management and Assessment | Theory on the social nature of oral and written language and congruent teaching, management and assessment practices. Emphasizes skills, strategies and dispositions for teaching 21st-century multimodal literacies to diverse learners including ELL with a focus on learners as creators of content, communicators, collaborators and global citizens. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 478 | Student Teaching in the Elementary School | Student teaching in elementary school classrooms, Synthesized experience in curriculum, instruction, and classroom management | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| EED | 496 | Field Experience III | Applies course content in a K/8 school classroom. Emphasizes observation, pupil management, planning and delivery of instruction, and assessment. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| EED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | L | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): admission to the Professional Teacher Preparation Program |
| EED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 511 | Principles of Curriculum Development | Contemporary curriculum theories. Curriculum as an interrelated entity. Principles of conceiving and effecting change. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 521 | Instructional Planning and Management in the Inclusive Classroom | Planning and delivering instruction; organizing and managing classrooms; making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 524 | Social Studies in Elementary Schools | Provides strategies for integrating social studies content knowledge with other curricular areas. Addresses a variety of issues related to social studies instruction in the elementary school, with an emphasis on valuing diverse cultures and experiences within historical and geographical perspectives. Emphasizes meeting the academic and linguistic needs of all learners including English language learners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 526 | Communication Arts in the Elementary School | Critical examination of school language arts teaching, focusing on theoretical assumptions regarding oral- and written-language development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 529 | Science in the Elementary School | Problems and trends of current programs. Development of a balanced and articulated science program. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 531 | Teaching with Educational Technology | Focuses on using technology in K-12 classrooms. Addresses the integration of technology in all curricular areas for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 537 | Mathematics in the Elementary School | Contemporary mathematics teaching. Content, materials, and approaches to instruction. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 567 | Clinical Experience I | Advanced application of course content in elementary education classrooms; observations, pupil management, planning, and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 576 | Clinical Experience II | Applies course content in elementary classrooms: observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): EED 567; degree- or nondegree-seeking graduate student |
| EED | 578 | Student Teaching in the Elementary School | Student teaching in elementary education setting for students in the MED with Concentration in Teacher Certification. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EED | 579 | Apprentice Teaching in Elementary Education | Apprentice teaching in elementary school classrooms. Synthesized experience in classroom management, curriculum, instruction and assessment. Must be taken four times for a total of 12 semester hours. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| EED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| EEE | 101 | Introduction to Engineering Design | Introduces engineering design, teaming, engineering profession; computer models and programming; communication skills; design of electrical and computer-based systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 2 | | |
| EEE | 120 | Digital Design Fundamentals | Number systems, conversion methods, binary and complement arithmetic, Boolean algebra, circuit minimization, ROMs, PLAs, flipflops, synchronous sequential circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | |
| EEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | |
| EEE | 202 | Circuits I | Principles for analyzing linear and nonlinear circuits. Uses SPICE and MATLAB. Design and measurement of linear analog electrical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Pre/Co-requisites: MAT 274 (or MAT 275), and PHY 131 (with C or better if completed) |
| EEE | 203 | Signals and Systems I | Introduces continuous and discrete time signal and system analysis, linear systems, Fourier, and z-transforms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: EEE 202; Pre-requisite: MAT 242 with C or better if completed or Pre/Co-requisite: MAT 342 or 343 with C or better if completed |
| EEE | 230 | Computer Organization and Assembly Language Programming | Register-level computer organization. Instruction set architecture. Assembly language. Processor organization and design. Memory organization. IO programming, Exception/interrupt handling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Pre-requisites: CSE 100, 110 or 200; CSE 120 or EEE 120; Credit is allowed for only EEE 230 or CSE 230 |
| EEE | 241 | Fundamentals of Electromagnetics | Vector analysis, differential operators, fourier analysis, scalar, vector fields, electro/magneto statics, time-varying fields, boundary value problems, dielectric, magnetic materials, Maxwell's equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): MAT 267 or 272 with C or better; MAT 274 or 275 with C or better; PHY 131 with C or better; Pre- or corequisite(s): EEE 202 |
| EEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 304 | Signals and Systems II | Communication, signal processing, control systems, continuous, discrete transforms, sampling theorem, analog, digital modulation, filter design, signal processing applications, state space. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 |
| EEE | 333 | Hardware Design Languages and Programmable Logic | Develops digital logic with modern practices of hardware description languages. Emphasizes usage, synthesis of digital systems for programmable logic, VLSI. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 202 |

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| EEE | 334 | Circuits II | Design of analog and digital circuits. Diodes/BJT's/Mosfets. Digital and analog circuit building blocks. Fundamentals of mixed signal circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, BHSE undergraduate student or Computer Systems Engineering or Computer Systems Engineering (Information Assurance) student; EEE 202 |
| EEE | 335 | Analog and Digital Circuits | Analog, digital microelectronic circuits and systems. Amplifiers, frequency response, gate sizing, timing analysis, sequential digital circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 334 |
| EEE | 341 | Engineering Electromagnetics | Time-varying electromagnetic fields, waves in homogeneous and stratified media, transmission lines, waveguides and cavity resonators, radiation and antennas. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203; EEE 241 |
| EEE | 350 | Random Signal Analysis | Probabilistic and statistical analysis as applied to electrical signals and systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; MAE 317 or pre- or corequisite: EEE 203; or Fulton Engineering graduate student |
| EEE | 352 | Properties of Electronic Materials | Schrodinger's wave equation, potential barrier problems, bonds of crystals, the band theory of solids, semiconductors, superconductor dielectric, and magnetic properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114, 115, 116 or 118; EEE 241; PHY 241 with a C or better |
| EEE | 360 | Energy Systems and Power Electronics | Conventional and alternate energy sources for power systems, three-phase analysis, AC generators, transformers, induction, DC motors, power electronic speed control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 202; Pre- or corequisite(s): EEE 241 |
| EEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | |
| EEE | 404 | Real-Time DSP Systems | Digital signal processors, translating signals and systems concepts into real-time multimedia and communications applications, real-time algorithms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CSE 230 or EEE 230; EEE 203 |
| EEE | 407 | Digital Signal Processing | Time and frequency domain analysis, difference equations, z-transform, FIR and IIR digital filter design, discrete Fourier transform, FFT, and random sequences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisites: Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203; MAT 342 or 343 with C or better |
| EEE | 425 | Digital Systems and Circuits | Digital logic gate analysis and design. Propagation delay times, fan out, power dissipation, noise margins. Design of MOS and bipolar logic families, including NMOS, CMOS, standard and advanced TTL, ECL, and BiCMOS. Inverter, combinational and sequential logic circuit design, MOS memories, VLSI circuits. Computer simulations using PSPICE. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 335 |
| EEE | 433 | Analog Integrated Circuits | Analysis, design, and applications of modern analog circuits using integrated bipolar and field-effect transistor technologies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 335 |
| EEE | 434 | Quantum Mechanics for Engineers | Angular momentum, wave packets, Schrodinger wave equation, probability, problems in one dimension, principles of wave mechanics, scattering, tunneling, central forces, angular momentum, hydrogen atom, perturbation theory, variational techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 435 | Fundamentals of CMOS and MEMS | Introduces basic CMOS processing and fabrication tools. Covers the fundamentals of thermal oxidation, CVD, implantation, diffusion, and process integration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 436 | Fundamentals of Solid-State Devices | Semiconductor fundamentals, pn junctions, metal-semiconductor contacts, metal-oxide-semiconductor capacitors and field-effect transistors, bipolar junction transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 437 | Optoelectronics | Basic operating principles of various types of optoelectronic devices that play important roles in commercial and communication electronics; light-emitting diodes, injection lasers, and photodetectors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 436 |
| EEE | 439 | Semiconductor Facilities and Cleanroom Practices | Microcontamination, controlled environments, cleanroom layout and systems, modeling, codes and legislation, ultrapure water, production materials, personnel and operations, hazard management, advanced concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352 |
| EEE | 443 | Antennas for Wireless Communications | Fundamental parameters; radiation integrals; wireless systems; wire, loop, and microstrip antennas; antenna arrays; smart antennas; ground effects; multipath. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 |
| EEE | 445 | Microwaves | Waveguides; circuit theory for waveguiding systems; microwave devices, systems, and energy sources; striplines and microstrips; impedance matching transformers; measurements. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 (EEE 340) |
| EEE | 448 | Fiber Optics | Principles of fiber-optic communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 341 (EEE 340) |
| EEE | 455 | Communication Systems | Signal analysis techniques applied to the operation of electrical communication systems. Introduction to and overview of modern digital and analog communications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 350 |
| EEE | 459 | Communication Networks | Fundamentals of communication networks. Study of Seven-Layer OSI model. Focus on functionality and performance of protocols used in communication networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203; Corequisite(s): EEE 350 |
| EEE | 460 | Nuclear Power Engineering | Radioactivity and decay. Radiation interactions and dose. Nuclear reaction, fission and fusion theory. Fission reactors, four factor formula, moderation. Nuclear power, TMI, Chernobyl. Nuclear fuel cycle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114 or 116; MAT 274 or 275 with C or better; PHY 241 or 361 with C or better |

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| EEE | 463 | Electrical Power Plants | Generation of electric power using fossil, nuclear, and renewable, including solar, geothermal, wind, hydroelectric, biomass and ocean, energy sources. Power plant thermal cycle analysis. Cogeneration and combined cycles. Economics, operations, and design of electric power stations. Energy storage. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; CHM 114 or 116; MAE 240 (or ECE 340) or PHY 241 with C or better; MAT 274 or 275 with C or better |
| EEE | 465 | Photovoltaic Energy Conversion | Photovoltaics for production of electricity from solar energy. The grand energy challenge. Solar radiation and utilization. Fundamentals of semiconductors for photovoltaics: crystal structures, band theory, doping, carrier statistics, optical absorption, and p-n junctions. Principles of solar cells including loss mechanisms and design principles. Current solar cell technologies. Manufacturing of silicon solar cells. Solar modules, arrays and systems. Economic analysis of solar photovoltaic systems. Terawatt-scale deployment of solar cells. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 352; Credit is allowed for only EEE 465 or 498: Solar Energy |
| EEE | 470 | Electric Power Devices | Analyzes devices used for short circuit protection, including circuit breakers, relays, and current and voltage transducers. Protection against switching and lightning over voltages. Insulation coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 471 | Power System Analysis | Review of transmission line parameter calculation. Zero sequence impedance, symmetrical components for fault analysis, short circuit calculation, review of power flow analysis, power system stability, and power system control concepts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 472 | Power Electronics and Power Management | Principles of switch mode power conversion, analysis, design and control of dc-dc converters, PWM rectifiers and inverters, power management, power electronics applications in information technology, renewable energy systems, motion control and lighting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 |
| EEE | 473 | Electrical Machinery | Operating principles, modeling and speed control of DC, brushless DC, and AC machines; power converters for DC and AC motors drives. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 360 |
| EEE | 480 | Feedback Systems | Analysis and design of linear feedback systems. Frequency response and root locus techniques, series compensation, and state variable feedback. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 or MAE 318 with C or better |
| EEE | 481 | Computer-Controlled Systems | Implements computer-based, embedded, control systems using MATLAB xPC Target toolbox. Small-scale, representative projects demonstrate theoretical issues and provide hands-on expertise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 203 and EEE 230/CSE 230, or MAE 318 |
| EEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |
| EEE | 488 | Senior Design Laboratory I | Design process: research, concept, feasibility, simulation, specifications, benchmarking, and proposal generation. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; ENG 102, 105 or 108, EEE 241; EEE 334; EEE 350; three courses from the following list: EEE 304, 333, 335, 341, 352 or 360 |
| EEE | 489 | Senior Design Laboratory II | Implement, evaluate, and document EEE 488 design. Social, economic, and safety considerations. Technical communications and team skills enrichment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | L | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE senior or post-bacc undergraduate student; EEE 488 |
| EEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 0-6 | L | Prerequisite(s): Barrett Honors Electrical Engineering BSE senior |
| EEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student; EEE 433 |
| EEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-7 | | Prerequisite(s): Fulton ECEE, SEMTE, or BHSE undergraduate student |
| EEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-3 | | Prerequisite(s): Electrical Engineering BSE senior |
| EEE | 501 | Overview of Electrical Engineering | Electromagnetic fields, electrical circuit analysis, transmission lines, communications systems, electromagnetic interference and compatibility, computational techniques and electromagnetic software | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 505 | Time-Frequency Signal Processing | Joint time-frequency analysis of time-varying signals and systems; linear and quadratic time-frequency representations; applications in current areas of signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 506 | Digital Spectral Analysis | Principles and applications of digital spectral analysis, least squares, random sequences, parametric, and nonparametric methods for spectral estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 507 | Multidimensional Signal Processing | Processing and representation of multidimensional signals. Design of systems for processing multidimensional data. Introduces image and array processing issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 508 | Digital Image and Video Processing and Compression | Fundamentals of digital image perception, representation, processing, and compression. Emphasizes image coding techniques. Signals include still pictures and motion video. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 509 | DSP Algorithms and Software | Linear systems review, digital filter design, software aspects, DFT, FFT, random signals, programming aspects, applications projects, MATLAB and Java simulations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 510 | Multimedia Signal Processing | Speech/audio coding algorithms. LPC, CELP, MPEG, Cell phone, DTV, cinema, and surround sound standards. MPEG/JPEG introduction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 511 | Artificial Neural Computation | Networks for computation, learning function representations from data, learning algorithms and analysis, function approximation and information representation by networks, applications in control systems and signal analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit for only MSE 518, EEE 518, MAE 518, MSE 475, or CHE 518 |
| EEE | 523 | Advanced Analog Integrated Circuits | Analysis and design of analog integrated circuits: analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 524 | Communication Transceiver Circuits Design | Communication transceivers and radio frequency system design; fundamentals of transceivers circuits; RF, IF, mixers, filters, frequency synthesizers, receivers, CAD tools, and lab work on IC design stations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 525 | VLSI Design | Analysis and design of Very Large Scale Integrated (VLSI) circuits. Physics of small devices, fabrication, regular structures, and system timing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 526 | VLSI Architectures | High throughput and low-power VLSI architectures for signal processing. Array processor systems; data path design and optimization; memory design; high-level synthesis; low-power design at system level, algorithm level, and architecture level. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 527 | Analog to Digital Converters | Detailed introduction to the design of Nyquist rate, CMOS analog to digital converters. Requires knowledge of analog integrated circuits (analog circuit blocks, reference circuits, operational-amplifier circuits, feedback, and nonlinear circuits) to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 528 | Introduction to Microelectromechanical Systems | Microelectromechanical systems and devices emphasizing analytical and numerical modeling of actuation and sensing mechanisms with an overview of fabrication technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 530 | Advanced Silicon Processing | Thin films, CVD, oxidation, diffusion, ion-implantation for VLSI, metallization, silicides, advanced lithography, dry etching, rapid thermal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 531 | Semiconductor Device Theory I | Transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 532 | Semiconductor Device Theory II | Advanced MOSFETs, charge-coupled devices, solar cells, photodetectors, light-emitting diodes, microwave devices, and modulation-doped structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 533 | Semiconductor Process/Device Simulation | Process simulation concepts, oxidation, ion implantation, diffusion, device simulation concepts, pn junctions, MOS devices, bipolar transistors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 534 | Semiconductor Transport | Carrier transport in semiconductors. Hall effect, high electric field, Boltzmann equation, correlation functions, and carrier-carrier interactions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 535 | Electron Transport in Nanostructures | Nanostructure physics and applications. 2-D electron systems, quantum wires and dots, ballistic transport, quantum interference, and single-electron tunneling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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|---------|-------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| EEE | 536 | Semiconductor Characterization | Measurement techniques for semiconductor materials and devices. Electrical, optical, physical, and chemical characterization methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 537 | Semiconductor Optoelectronics | Electronic states in semiconductors, quantum theory of radiation, absorption processes, radiative processes, nonradiative processes, photoluminescence, and photonic devices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 539 | Intro Solid-State Electronics | Crystal lattices, reciprocal lattices, quantum statistics, lattice dynamics, equilibrium, and nonequilibrium processes in semiconductors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 540 | Fast Computational Electromagnetics | Method of moments, finite difference time-domain, finite element methods implemented using fast algorithms (wavelets, FMM, Nystrom) to gain high efficiency. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 541 | Electromagnetic Fields and Guided Waves | Polarization and magnetization; dielectric, conducting, anisotropic, and semiconducting media; duality, uniqueness, and image theory; plane wave functions, waveguides, resonators, and surface guided waves. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 543 | Antenna Analysis and Design | Impedances, broadband antennas, frequency independent antennas, miniaturization, aperture antennas, horns, reflectors, lens antennas, and continuous sources design techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 544 | High-Resolution Radar | Fundamentals; wideband coherent design, waveforms, and processing; stepped frequency; synthetic aperture radar (SAR); inverse synthetic aperture radar (ISAR); Imaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 545 | Microwave Circuit Design | Analysis and design of microwave attenuators, in-phase and quadrature-phase power dividers, magic tees, directional couplers, phase shifters, DC blocks, and equalizers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 546 | Advanced Fiber Optics | Theory of propagation in fibers, couplers and connectors, distribution networks, modulation, noise and detection, system design, and fiber sensors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 547 | Microwave Solid-State Circuit Design I | Applies semiconductor characteristics to practical design of microwave mixers, detectors, limiters, switches, attenuators, multipliers, phase shifters, and amplifiers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 548 | Coherent Optics | Diffraction, lenses, optical processing, holography, electro-optics, and lasers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 550 | Transform Theory and Applications | Introduces abstract integration, function spaces, and complex analysis in the context of integral transform theory. Applications to signal analysis, communication theory, and system theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 551 | Information Theory | Entropy and mutual information, source and channel coding theorems, applications for communication and signal processing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 552 | Digital Communications | Complex signal theory, digital modulation, optimal coherent and incoherent receivers, channel codes, coded modulation, Viterbi algorithm. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 553 | Coding and Cryptography | Introduces algebra, block and convolutional codes, decoding algorithms, turbo codes, coded modulation, private and public key cryptography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 554 | Random Signal Theory | Applies statistical techniques to the representation and analysis of electrical signals and to communications systems analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 556 | Detection and Estimation Theory | Combines the classical techniques of statistical inference and the random process characterization of communication, radar, and other modern data processing systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 557 | Broadband Networks | Physics of wireless and optical communications. Broadband multiplexing and switching methods. Blocking and queuing analysis. Network optimization, routing, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 558 | Wireless Communications | Cellular systems, path loss, multipath fading channels, modulation and signaling for wireless, diversity, equalization coding, spread spectrum, TDMA/FDMA/CDMA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 559 | Wireless Networks | Design principles of cellular networks. Multiple access control protocols for wireless systems. Wireless routing and TCP/IP. Mobile management. Call admission control and resource allocation (e.g., power control and rate control). Wireless security. Future-generation wireless networks. A previous course in random signal theory is required to be successful in this class. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only CSE 591 (Wireless Networks), EEE 559 or 598 (Wireless Networks) |
| EEE | 562 | Nuclear Reactor Theory and Design | Principles of neutron chain reacting systems. Neutron diffusion and moderation. One-, two-, and multigroup diffusion equation solution methods. Heterogeneous reactors. Nuclear fuel steady-state performance. Core thermal-hydraulics. Core thermal design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 563 | Nuclear Reactor System Dynamics and Diagnostics | Time-dependent solution to neutron diffusion equation. Reactor kinetics and reactivity changes. Dynamics, stability, and control of reactor systems. Modeling neutronic and thermal processes. System characterization in time and frequency domains. Reactor surveillance and diagnostics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 564 | Interdisciplinary Nuclear Power Operations | Nuclear power plant systems. Studies interrelationship and propagation of effects that systems and design changes have on one another, especially in relation to nuclear power plant safety and operations. Case studies and design projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 565 | Solar Cells | Introduction to the generation and utilization of electricity from solar energy. Exploration of the science and engineering of direct conversion (photovoltaics), including the design, fabrication, and operation of solar cells, and the construction and performance of solar cell modules. Prior knowledge of properties of electronic materials is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 571 | Power System Transients | Simple switching transients. Transient analysis by deduction. Damping of transients. Capacitor and reactor switching. Transient recovery voltage. Travelling waves on transmission lines. Lightning. Protection of equipment against transient overvoltages. Introduces computer analysis of transients. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 572 | Advanced Power Electronics | Analyzes device operation, including thyristors, gate-turn-off thyristors, and transistors. Design of rectifier and inverter circuits. Applications such as variable speed drives, HVDC, motor control, and uninterruptable power supplies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 573 | Electric Power Quality | Sinusoidal waveshape maintenance; study of momentary events, power system harmonics, instrumentation, filters, power conditioners, and other power quality enhancement methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 574 | Computer Solution of Power Systems | Algorithms for digital computation for the Newton and fast-decoupled power flow problem, and fault analysis. Sparse matrix and vector programming methods, creation of elimination trees, network equivalent, solution of the least squares problem, introduction to state estimation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 575 | Power System Stability | Dynamic performance of power systems with emphasis on stability. Modeling of system components and control equipment. Analysis of the dynamic behavior of the system in response to small and large disturbances. Knowledge of EEE470, 471 and 473 (or equivalents) is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 576 | Power System Dynamics | Dynamic performance of power systems with emphasis on control. Modeling of control equipment, FACTS devices, wind generators, and nonlinear loads. Design of power system stabilizers. Prior knowledge of electric power devices, power system analysis, and electrical machinery is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit is allowed for only EEE 576 or 598 (Power System Dynamics) |
| EEE | 577 | Power Engineering Operations and Planning | Economic dispatch, unit commitment, dynamic programming, power system planning and operation, control, generation modeling, AGC, and power production. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 579 | Power Transmission and Distribution | High-voltage transmission line electric design; conductors, corona, RI and TV noise, insulators, clearances. DC characteristic, feeders voltage drop, and capacitors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 581 | Filtering of Stochastic Processes | Modeling, estimation, and filtering of stochastic processes, with emphasis on the Kalman filter and its applications in signal processing and control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 582 | Linear System Theory | Controllability, observability, and realization theory for multivariable continuous time systems. Stabilization and asymptotic state estimation. Disturbance decoupling, noninteracting control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 586 | Nonlinear Control Systems | Stability theory, including phase-plane, describing function, Liapunov's method, and frequency domain criteria for continuous and discrete, nonlinear, and time-varying systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 587 | Optimal Control | Optimal control of systems. Calculus of variations, dynamic programming, linear quadratic regulator, numerical methods, and Pontryagin's principle. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 588 | Design of Multivariable Control Systems | Practical tools for designing robust MIMO controllers. State feedback and estimation, model-based compensators, MIMO design methodologies, CAD, real-world applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 589 | Linear Algebra and Convex Optimization | Linear algebra and convex optimization. Vector spaces, matrix algebra, linear programming, Lagrange multipliers, Karush-Kuhn-Tucker (KKT) conditions, duality theory and algorithms for convex optimization. Newton's method, gradient and steepest descent methods. Algorithms for unconstrained, equality constrained and inequality constrained problems, which include interior point methods. Applications to approximation and data fitting and some geometric problems. Applications to signal processing, communications and control systems. Background in linear algebra necessary to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student; Credit allowed for only EEE 589 or 598: Advanced Linear Algebra & Opt |
| EEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Master of Engineering or Electrical Engineering MS, MSE or PHD students |
| EEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 606 | Adaptive Signal Processing | Principles and applications of adaptive signal processing, adaptive linear combiner, Wiener least-squares solution, gradient search, performance surfaces, LMS/RLS algorithms, block time/frequency domain LMS. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 607 | Speech Coding for Multimedia Communications | Speech and audio coding algorithms for applications in wireless communications and multimedia computing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |

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| EEE | 625 | Advanced VLSI Design | Practical industrial techniques, circuits, and architectures appropriate to high-performance and low-power digital VLSI designs such as microprocessors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 4 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 627 | Oversampling Sigma-Delta Data Converters | Introduces design and analysis of sigma delta oversampled data converters from an IC design perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 631 | Advanced Optoelectronics | Principles of heterojunctions and quantum well structures, band lineups, optical, and electrical properties. Introduces heterojunction devices. Knowledge of transport and recombination theory, pn and Schottky barrier diodes, bipolar and junction field-effect transistors, and MOS capacitors and transistors. is required to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 641 | Advanced Electromagnetic Field Theory | Cylindrical wave functions, waveguides, and resonators; spherical wave functions and resonators; scattering from planar, cylindrical, and spherical surfaces; Green's functions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 643 | Advanced Topics in Electromagnetic Radiation | High-frequency asymptotic techniques, geometrical and physical theories of diffraction (GTD and PTD), moment method (MM), radar cross section (RCS) prediction, Fourier transforms in radiation, and synthesis methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 686 | Adaptive Control | Main topics covered: adaptive identification, convergence, parametric models, performance and robustness properties of adaptive controllers, persistence of excitation, and stability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering MS, MSE, or PHD student or Master of Engineering student |
| EEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 731 | Advanced MOS Devices | Threshold voltage, subthreshold current, scaling, small geometry effects, hot electrons, and alternative structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 3 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Electrical Engineering PhD students |

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| EEE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-12 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Electrical Engineering Program | 1 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Electrical Engineering Program | 1-15 | | Prerequisite(s): Fulton Electrical, Computer and Energy Engineering (ECEE) graduate student or CIDSE, SBHSE, SEMTE or SSEBE graduate student |
| EET | 406 | Control System Technology | Control system components, analysis of feedback control systems, stability, performance, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3-4 | | Pre-requisites: EST 310; MAT 266; Credit for EET 506 or EET 406 |
| EET | 408 | Digital Real-Time Control | Analysis, simulation, and design of discrete systems. Approach taken in this class begins with the analysis, simulation and design of a continuous system, which yields an s-based, transfer function compensator. Then, this compensator is transformed into a z-based transfer function, which can be realized with a difference equation in a microcontroller. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EET 406; Credit is allowed for only EET 408 or 494 (Digital Realtime Control) |
| EET | 430 | Instrumentation and Measurement Systems | Instrumentation and measurement techniques, sensors operating principles. Signal and error analysis. Signal conditioning and data acquisition. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 310; Credit is allowed for only EET 430 or 530 |
| EET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EET | 506 | System Dynamics and Control | Time, frequency, and transform domain analysis of physical systems. Transfer function analysis of feedback control systems performance and stability. Compensation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 406 or EET 506 |
| EET | 508 | Digital Real-Time Control | Sample data control techniques and applications to process control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EET | 530 | Electronic Test Systems and Applications | Analysis, design, and application of electronic test equipment, test systems, specifications, and documentation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only EET 430 or EET 530 |
| EET | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EGR | 101 | Foundations of Engineering Design Project I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only SER 101 or EGR 101 |
| EGR | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CADD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 101; MAT 170 or higher; Pre- or corequisite(s): ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| EGR | 103 | Introduction to Human Systems Engineering | Introduces basic principles, methods and theories of psychology and applications to engineering problems relevant to human systems. Gives particular attention to the intersection of psychology and engineering. Students learn brain anatomy and physiology, sensation and perception, cognition, social systems and research methods so that they are able to design systems consistent with human capabilities and limitations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | |
| EGR | 104 | Critical Inquiry in Engineering | Critical thinking. Systematic evaluation of information as input to well-informed decision making. Close reading and substantive writing in a technical setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): ENG 101, 105 or 107 |
| EGR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 201 | Use-Inspired Design Project I | Design, professionalism, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): APM 265, 270, MAT 265 or 270; EGR 102 |
| EGR | 202 | Use-Inspired Design Project II | Design, problem solving, and engineering practice developed in a multidisciplinary project setting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 201 |

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| EGR | 216 | Engineering Electrical Fundamentals | Introduces modeling of electrical systems using mathematical and scientific principles. Covers electrical circuit analysis techniques including Kirchhoff's and Ohm's laws, series and parallel circuit elements, equivalent elements and circuits, and nodal analysis. These techniques are developed for DC, AC, and transient conditions. Also introduces the basic structure of a modern electronic measurement system and relates this structure to measurement accuracy, precision and resolution. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MAT 265 or MAT 270. Credit is allowed for only EGR 216 or 294 Engineering Fundamentals I |
| EGR | 217 | Engineering Mechanics Fundamentals | Provides a foundation in the theory and principles of statics and dynamics. Examines the effect of forces acting on particles and rigid bodies. Vector mechanics is used extensively. Statics addresses the topics of equilibrium in two and three dimensions, to include distributed loads, trusses, frames, friction and cables. Dynamics addresses kinematics, including translating and rotating reference frames, and two-dimensional kinetics methods of force-acceleration, work-energy, and impulse-momentum. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: PHY 121. Credit is allowed for only EGR 217 or 294 Engineering Fundamentals II |
| EGR | 218 | Materials and Manufacturing Processes | Applies material properties and manufacturing processes to the design and fabrication of engineered artifacts. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): CHM 113 or 114. Credit is allowed for only EGR 218 or 294 Engineering Materials & Manufacturing |
| EGR | 219 | Computational Modeling of Engineering Systems | Introduces computing that develops software to find solutions to engineering problems. Students write and document code to solve problems in data acquisition, modeling of physical systems, and optimization. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EGR 219 or 294 Computational Modeling |
| EGR | 223 | Biology of Human Systems | Introduces the biological basis of human behavior and implications for human systems engineering. Structure and function of the nervous system as well as the behavioral effects of the physiological processes outside the brain (for example, hormones secreted by glands). Biological processes involved in many aspects of our behavior such as eating, sleeping, sexual behavior, emotional responses, sensory perception, learning and memory, language and cognitive functions, mental illness and drug abuses. Introduces a wide range of techniques and methods used to investigate the biological foundations of behavior. Prepares students for advanced courses in neuroscience, psychology or related fields. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 224 | Social Basis of Human Systems | Covers social behaviors, social cognition and emotion critical for engineered systems that interact with humans (artificial intelligence, robots). Students learn how human beings behave, think and feel in daily social situations and think about how that information can be used to create effective human systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 225 | Human Systems Integration | Reviews human systems integration (HSI), which is basically systems engineering from a human-centered perspective. Research, theory and methodological approach as applied to a variety of systems ranging from transportation systems to medical and military systems. Discusses handbook chapters and specific examples of human systems integration. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 230 | Human Systems and Statistics I | Basic methods of exploratory data analysis (including graphics) and statistical computing methods, including a detailed look at hypothesis testing, effect size and power analysis, as well as some methods for dealing with categorical and discrete data. Introduces both correlation/regression and analysis of variance (ANOVA), as well as common statistical software. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): EGR 103 or PSY 101 (or PGS 101) with C or better; MAT 119 or 171 or 265 with C or better |
| EGR | 240 | CADD and Solid Modeling | Uses 3-D solid modeling software to model mechanical parts and produce valid engineering drawings, including use of geometric dimensioning and tolerancing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EGR | 280 | Engineering Statistics | Applications-oriented introduction to statistics with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): APM 265, 270, MAT 265 or 270 |
| EGR | 290 | Experimental Research Methods in Human Systems Engineering | Introduces the basics of research methodology as applied in human systems engineering. Quantitative and experimental design from an applied perspective. Guided study of the process of conducting research within human systems engineering. Project topics range from research question generation and literature review to reporting of results. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 103 or PSY 101 |
| EGR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 301 | Concentration Project I | Design, communication, and critical thinking developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MAT 267 or MAT 272 |
| EGR | 302 | Concentration Project II | Design, engineering practice, and communication developed in a project setting based on selected concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 301 |

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| EGR | 303 | Mechanical Systems Project I | Analyze, design, implement and characterize a mechanical system through an in-depth mechanical system design project. Project includes modeling, analysis and measurement of the dynamic behavior of the mechanical system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 304 | Electrical Systems Project I | Analyze, design, implement and debug an electrical or electromechanical system through an in-depth electrical system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 216, 219 |
| EGR | 305 | Robotics Systems Project I | Analyze, design, implement and debug a robotic electromechanical system through an in-depth robotic system design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 216, 219 |
| EGR | 306 | Automotive Systems Project I | Analyze, design, implement and verify an automotive system through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218; EGR 219 |
| EGR | 307 | Humanitarian Engineering Project I | Analyzes, designs, implements and characterizes an engineered system that addresses a humanitarian objective. Project includes modeling, analysis and measurement of the behavior of the system. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217. Pre- or corequisite(s): EGR 321 |
| EGR | 308 | Manufacturing System Project I | Focuses on design for product realization in a manufacturing environment. Projects are industry driven and applicable to low-volume product development. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 217; EGR 218 |
| EGR | 310 | Environmental Systems Project I | Analyze, design, implement and verify an engineered system that addresses an environmental objective through an in-depth design project. Develops professional and engineering skills in this project setting. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217. Pre- or corequisite(s): EGR 321 |
| EGR | 312 | Environmental Systems Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses an environmental need in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of environmental engineering; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 310 |
| EGR | 313 | Mechanical Systems Project II | Applies design principles to conceptualize, implement and characterize a fluid and/or thermodynamic system in a project setting. Project emphasizes communication with project stakeholders; applying an appropriate design approach in the context of a fluid and/or thermodynamic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202, 217, 218, 340 |
| EGR | 314 | Electrical Systems Project II | Applies design principles to conceptualize, implement and characterize an electrical or electromechanical system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an electrical system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 304, 330 (or EGR 333) |
| EGR | 315 | Robotic Systems Project II | Applies design principles to conceptualize, implement and characterize an electromechanical robotic system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of a robotic system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 305, 455 |
| EGR | 316 | Automotive Systems Project II | Applies design principles to conceptualize, implement and characterize an automotive system in a project setting. Project emphasizes communication with project stakeholders; applying a human-centered design approach in the context of an automotive system; critical thinking in developing system specifications and evaluating a prototype relative to these specifications; and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 306, 340 |
| EGR | 317 | Humanitarian Engineering Project II | Applies design principles to conceptualize, implement and characterize an engineered system that addresses a humanitarian objective in a project setting. Project emphasizes communication with project stakeholders, applying an appropriate design approach, thinking critically in developing system specifications and evaluating a prototype relative to these specifications, and increasing technical competence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 307; EGR 371 |

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| EGR | 318 | Manufacturing Systems Project II | Focuses on process development for high-volume manufacturing in the competitive global economy. Uses discrete event simulation software to model and study the manufacturing environments. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202; EGR 219; EGR 382 |
| EGR | 320 | Human Systems and Statistics II | Statistical methods commonly used in human systems engineering research. Emphasizes (1) connecting research designs and statistical analysis, (2) interpreting and breaking down significant effects, (3) addressing practical problems associated with doing research in applied contexts, (4) using statistical methods to understand the connection between variables in a complex system, and (5) the use of statistical software. Primarily focuses on analysis of variance (ANOVA) but introduces other techniques (including mediation analysis, structural equation modeling and cluster analysis). Recommended for preparation for both graduate study and careers in related industry. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Prerequisite(s): EGR 230 or PSY 230 or PSY 231 |
| EGR | 321 | Water Resource Systems | Fundamentals of water supply and surface water hydrology in the context of the engineering, design and analysis of water resources systems. Places particular emphasis on those aspects of water systems that apply in the context of the developing world as well as in the context of environmentally sustainable systems. Course delivery is designed for engineering students with a broad understanding of engineering fundamentals but without specialist civil engineering knowledge. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219 |
| EGR | 322 | Cognition and Human Systems | Human cognition and how it bears on the design of technological and social systems. Although focuses on applications, requires student to delve into the basic literature that informs these applications and produce a literature review that draws on both applied and theoretical work. Many weeks involve a hands-on experience with a method or technique, and weekly quizzes emphasize critical thinking about these examples. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | SB | Prerequisite(s): EGR 103 or PSY 101; junior or senior standing |
| EGR | 323 | Perception and Human Systems | In-depth exploration of methods by which humans receive and interpret information from the world by vision, audition, taste, smell, touch and movement. Emphasizes the integration of behavioral and neural research with potential applications to engineering practice. Topics cover a wide range from the biological basis of sensory information processing to the behavioral aspects of perception, and to the applications of perceptual theories to disciplines like computer vision, display technologies, graphic design and sound processing. Solid foundation for further coursework and research in neuroscience or psychology; students also gain knowledge that could be useful in various professions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; junior or senior standing |
| EGR | 324 | Structural Design for Land Development | Covers essential structural engineering concepts including loads, materials, constraints, specifications, optimization, and the design environment; structural modeling, analysis, and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 221; EGR 222 |
| EGR | 325 | Water and Wastewater Treatment | Essential elements of aquatic chemistry, water pollution and water and wastewater treatment technologies. Provides a fundamental basis for understanding sustainable water and wastewater treatment processes and their design considerations. Includes critical evaluation of contemporary issues concerning our water environment and the associated regulatory framework to strengthen and emphasize importance of adequate practices used in operation and design of engineered water and wastewater treatment systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): CHM 113; EGR 321 |
| EGR | 330 | Design of Electrical Systems | Overview of electrical system architectures and components used in design of smart electrical and electromechanical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216; 219 |
| EGR | 333 | Distributed Circuits and Systems | Analysis and modeling of the generation and distribution of electrical signals and energy across distributed systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 334 | Analog-Digital Interface | Signal processing and operational tools that lie between sensors and digital data processors developed from a system perspective. Includes selection, deployment and analysis of sensors, analog signal processors and converters as well as their appropriate power supplies and the impact of all these components on system performance and cost. Uses experimental and simulation tools to demonstrate typical-use cases for medical, military, industrial and consumer applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 219 |
| EGR | 338 | Microcontrollers in Smart Systems | Microcontroller implementation of smart systems. Microcontrollers applied to control dynamic systems, including the interface with sensors and actuators as well as developing simple open- and closed-loop control laws. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 and 334 |

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| EGR | 339 | Fabrication of Electrical Systems | Overview of electrical fabrication techniques; design cycle time, cost, quality, reliability, product life cycle, and testing; programmable versus hard-wired implementation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 235; MAT 274 or 275 |
| EGR | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables. Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 121; APM 266, 271, MAT 266 or 271; Credit is allowed for only EGR or MET 340 |
| EGR | 343 | Mechanics of Solid Materials | Studies strength and physical performance, such as deformations and load-carrying capacity, of natural and artificial solid structures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217, 218 |
| EGR | 363 | Automotive Powertrains and Thermal Systems | Internal combustion engine (ICE) design in the context of automotive systems and heat management in vehicle systems, including thermal design of engine and transmission cooling systems. Operating characteristics and efficiencies of the ICE, terminology and abbreviations used in the automotive industry, contemporary fuels and the latest hybrid technology, CAFE standards and EPA vehicle emissions standards, lubrication systems and fluids appropriate for a given design, and current and future standards requirements. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340 |
| EGR | 371 | Best Practices for Humanitarian Engineering | Technological and process-based best practices for engineering students to gain applied competence in low-cost and low-tech appropriate methods and technologies for small-scale technical problems in local and international humanitarian development contexts. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering major; junior or senior standing |
| EGR | 381 | Manufacturing Processes and Validation Lab | Theory of basic manufacturing processes accompanied by the fundamental skills, safety practices while working with engineering drawings, machine tools and metrology equipment related to manufacturing. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217, 218 |
| EGR | 382 | Modeling of Manufacturing Systems I | Modeling of manufacturing systems using discrete event simulation. Introduces basic manufacturing-related data and system configurations. Uses commercial simulation software to build and analyze model output data. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 219, 280 |
| EGR | 383 | Communications in a Production Environment | Effective communication is essential in all production environments for efficiency, yield and safety. Covers the major applications within a company and the expectations for the individual's capabilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 202 (or EGR 240) |
| EGR | 385 | Design for Manufacturing | Introduces the methods employed to design and produce products that can compete in the global marketplace. Topics include design for manufacturability and assembly, product life-cycle, economics of design and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 |
| EGR | 386 | Integrated Circuit Manufacturing | Integrated circuit manufacturing combines judicious selection of materials with nano-meter features to create complex digital and analog circuits. The process demonstrates extreme applications of design, control and resource organization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216; EGR 280 |
| EGR | 387 | Industrial Automation | Introduces concepts and application of industrial automation systems. Topics include PLC control systems, embedded control systems, sensing technologies, robotics and material-handling systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 219 |
| EGR | 388 | Engineering Materials And Semiconductor Science | Semiconductor technology operates at the limits of our understanding of many sciences--materials, optics, mechanics, plasma chemistry and charge movement. As well as examining the concepts, considers how they interact within tight constraints and how this affects continuous production, future development options and trouble shooting. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: Engineering BSE or Manufacturing Engineering BS major; Junior standing |
| EGR | 390 | Qualitative Research Methods | Basics of qualitative research as it is implemented within the human systems engineering area. Covers methods of implementing core concepts such as validity and techniques of interviews; questionnaire and observation within various human system methodologies (e.g., cognitive task analysis, protocol analysis, and usability). All concepts taught with an applied focus with emphasis on how the methods can be implemented in real-world settings. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 290 or PSY 290 |
| EGR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 401 | Professional Design Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | L | Prerequisite(s): EGR 302, 312, 313, 314, 315, 316, 317 or 318 |
| EGR | 402 | Professional Design Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 401 taken within one previous term |

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| EGR | 422 | Human Medical Systems | Comprehensive introduction to human factors issues related to healthcare systems, medical training, and medical device design. Topics range from psychological and physiological aspects of human behavior like perceptual and cognitive functions, motor behavior, learning, motivation, physiology, and ergonomics to applied issues in the context of medicine and healthcare like human-computer interactions in medical information systems, the ergonomic design of medical devices, evaluation of medical device usability, team training in healthcare and the organization of medical environment. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 424 | Human Automation Interaction | Explores the application of human systems engineering to automation. Human-automation interaction in domains of cyber security, remotely piloted aircraft systems, synthetic teammates, and human-robot interaction. Reading and discussion related to current articles describing research, methodology and theory. | N | SEM | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 425 | Unit Treatment Technologies and Systems | Addresses fundamental concepts of unit treatment technologies and the scientific and engineering principles that govern the proper design, operation and management of these systems. Course is divided into two overlapping major categories of unit treatment technologies: air-pollution controls and soils/groundwater remediation. Enhances understanding of the unit treatment technologies by reviews of dimensional analysis, mass transport mechanisms, mass balances, modeling, kinetics and reactors. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 426 | Integrated Solid Waste Systems | Addresses the fundamental concepts of solid waste, pathways and transformation processes following the from cradle-to-grave approach. Follows the life of the solid waste from point of generation, reclamation and treatment to point of disposal. Emphasizes describing the present solid waste systems as an integrative set of functional units. Considers physical, chemical and biological transformations of the solid waste, together with the existing technologies and practices for management, treatment and disposal of the solid waste. Includes a specific overview of sustainable solid waste practices such as waste minimization, pollution prevention, reuse and reclamation, together with current domestic and foreign regulations. Addresses planning and design of solid waste operations and facilities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 427 | Principles of Hazardous Waste and Materials | Trains future environmental engineers and professionals in fundamental hazardous waste and materials concepts. Addresses regulatory requirements; materials hazard communication; material safety concepts; types of hazardous waste/materials (chemical, radioactive, and infectious); risk assessment and routes of exposure; personal protective equipment; prudent practices; treatment; storage and disposal of hazardous waste/materials through the lens of the cradle-to-grave concept. Gains knowledge about the hazardous waste enforcement processes. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 325 |
| EGR | 428 | Judgment and Decision Making in Human Systems | Covers human judgment and decision making as it applies to the design of intelligent systems or decision aids, tools for augmenting human judgment, and understanding consumer decision making. Covers judgment and decision making approaches, theories, biases, heuristics with applications to engineered systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 429 | Product Design and Evaluation | Applies human systems engineering methods to product design and evaluation. Consumer behavior, consumer research methods, systems and design thinking, how to conduct interviews, observational research, contextual analysis, questionnaire design and analysis, opportunity identification, usability testing and creativity. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 430 | Design, Fabrication, and Architecture of Electronic Devices | Comprehensive introduction to the design, operation, production and application of the most common semiconductor devices and categories of integrated circuit. Demonstrates the close interaction among materials, semiconductor physics and circuit performance, especially in terms of the applications and economics of digital systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 431 | Power Management | Devices and techniques to supply and manage power in electrical systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 330 |
| EGR | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 340; Credit is allowed for only EGR 432 or MET 432 |
| EGR | 433 | Transforms and Systems Modeling | State-space and transform-domain modeling and analysis of electrical and electromechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 217; MAT 274 or MAT 275. Pre-or corequisite(s): MAT 342 or MAT 343 |

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| EGR | 438 | RF Systems | Applies fundamental principles of electromagnetics to design and analyze engineered RF systems and applications. Introduces and describes transmission lines, Smith Charts, s-parameters, waves in free space, reflection and refraction and their use in engineering systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): PHY 331; Credit is allowed for only EGR 438 or EGR 494 (Fundamentals of RF) |
| EGR | 444 | Engineering Design | Applies fundamentals of mechanics in analysis and synthesis of machine components and systems, with emphasis on stress and failure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: EGR 343 |
| EGR | 445 | Mechanical Engineering Systems | Design and modeling of multicomponent electromechanical systems. Applications of computers, controllers, electronics using system hardware and software development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 303 or EGR 313 |
| EGR | 455 | Robotic Systems I | Analysis and design of robotic systems focusing on kinematics, dynamics, coordinate transformations and modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 217 and 219; Credit is allowed for only EGR 455 or EGR 394 (Robotics I) |
| EGR | 456 | Robotic Systems II | Design of robotic systems focusing on dynamics, modeling and controlling a robot. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 455 or EGR 394 (Robotics I). Credit is allowed for only EGR 456 or EGR 494 (Robotics II) |
| EGR | 463 | Vehicle Electrical Systems and Hybrid Systems | Basic theory and operation of hybrid electric drive systems of motor vehicles. Covers fundamentals of next generation electrification including: batteries technology, charging, power electronic operation. Emphasizes the principals of HEV energy management strategies and HEV modeling fundamentals. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 363 (or EGR 394 Intro to Concepts in Automotive Engineering) |
| EGR | 465 | Ground Vehicle Dynamics | Basic understanding of vehicle dynamics principles and a sufficient knowledge to analyze vehicle dynamic performance and associated chassis system design concepts. Understanding of various dynamical equations of motion governing vehicle behavior as well as computer simulation. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 363 (or EGR 394 Intro to Concepts in Automotive Engineering) |
| EGR | 472 | Learning and Human Systems Engineering | Learning as applied within the human systems engineering area. Overview of the theoretical areas relevant to learning (behavioral, social cognitive, cognitive, emotion and motivation). Applies these perspectives to enhance the design of systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 103 or PSY 101; EGR 290 or PSY 290; EGR 322 |
| EGR | 476 | Energy Infrastructures | Comprehensive study of sustainable energy conversion systems. Students learn to quantify and measure the concepts of sustainability of energy resources within the framework of the laws of thermodynamics. Covers conventional energy sources for primary power (fossil fuels, nuclear and hydroelectric); their sustainability, resource level and environmental impact. Covers the science and technology of heat engines and direct conversion methods. Considers conservation and reuse. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 340 |
| EGR | 480 | Advanced Statistical Approaches for Manufacturing | Applies experimental design and statistical process control in the manufacturing environment. Uses engineering statistical software to formulate and solve problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 280 |
| EGR | 481 | Enterprise Economics | All manufacturing is about cost. Considers the components of these costs and presents a number of mathematical tools and approaches for representing, understanding and making decisions based on them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 280 |
| EGR | 482 | Materials Science in Manufacturing | High-technology manufacturing combines and exploits the properties of a wide range of materials. Provides a science-based view of materials selection and optimization for product manufacturability and reliability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 4 | | Prerequisite(s): EGR 218 |
| EGR | 483 | Manufacturing Systems Operations | Introduces key factory management strategies, lean and six sigma philosophies, and global manufacturing supply chains. Software and computer model-based analysis and observation of factory and supply chain performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 382 |
| EGR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EGR | 485 | Engineering Internship | Experiential education. Local company oversees a student project experience at their facility. | N | PRA | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | Prerequisite(s): EGR 302 or EGR 318 |
| EGR | 486 | CNC Computer Programming | Theory and applications of NC languages using CAM software and CNC machine tools. Overview of advanced manufacturing processes including production CNC part programming ranging from current design to inspection standards. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 381 |
| EGR | 487 | Casting and Forming Processes | Theory and practice of metal casting processes and design of castings. Analysis of various forming processes to determine load requirements. Theory and practice of tooling design for stamping operations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 |
| EGR | 488 | Plasma Processing | Plasma processing is widely used in advanced technology manufacturing. Combines the principles of chemistry, materials, RF power and control to demonstrate key applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 216, 218, 280 |

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| EGR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EGR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EGR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EGR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EGR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 520 | Engineering System Design and Analysis | Develops a technical strategy to translate a user's operational needs into a physical solution to comply with specifications and requirements. Presents an approach for organizing, analyzing, designing, developing, verifying and validating systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 525 | Lean Systems | Creates a framework and model of lean engineering and a methodology for applying lean practices to systems engineering as a basis for lean product development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 530 | Principles of Systems Engineering | Engineering is increasingly about complex systems. Addresses scale, scope and complexity increase that engineers need to consider to bring together technical and social issues in a highly integrated way as they design flexible, adaptable, robust systems that can be easily modified and reconfigured to satisfy changing requirements and new technological opportunities. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 520 |
| EGR | 535 | Engineering Innovation and Entrepreneurship | Provides knowledge of innovation and entrepreneurship practices and experience in the application of engineering systems innovation within an entrepreneurial setting of driving a product or process to successful launch. Includes protection of intellectual property and contractual relations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 570 | Capstone Design | Comprehensive project experience based on cumulative knowledge and skills gained in earlier course work. Small-group project designing, building, evaluating and analyzing components, assemblies and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EGR 530 |
| EGR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EGR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EGR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 515 | Structured English Immersion (SEI) Methods | Addresses the role of language and culture in teaching, program types, and specific SEI strategies for teaching English Language Learners (ELLs). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELL | 516 | Advanced SEI Methods for ELLs | More fully prepares teachers for linguistically diverse classrooms in which there are students learning through SEI methodology. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 501 | Environmental Life Sciences: Grand Challenge: Global Climate Change | Introduces first-year graduate students to a range of fields related to the Environmental Life Sciences graduate program. Co-instructed by an interdisciplinary faculty team, combines overview lectures and active discussion of current literature in the fields of inquiry. Culminates in synthetic collaborative research proposals on topics that foster transdisciplinary approaches to environmental life science questions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 502 | Environmental Life Sciences: Field Camp | Combines lecture, field, and laboratory components; provides opportunities to develop field skills relevant to current questions in environmental life science, and to carry out a wide range of observations and measurements in natural systems. Instructed by an interdisciplinary faculty team. Travel out of the country is required and students need to be in possession of a valid passport. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: ELS 501 |
| ELS | 535 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ELS 535 or SOS 535 |
| ELS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| ELS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ELS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 501 | Sustainability Leadership Workshop I | Formally takes students into the four learning threads of the EMSL program and the ASU brand of sustainability. Hands-on collaboration and group time with peer cohort members, field trips and deep diving into discussion, and application of sustainability theories into real-world scenarios. Sustainability speakers and practitioners engage students in critical thought. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Executive Masters for Sustainability Leadership major |
| EMS | 502 | Global Context I | Leaders in any organization face an increasingly connected and transparent world where social and environmental issues must be weighed in everyday decisions. Explores iconic sustainability issues and trends and their impact on their organization, institutions, communities and stakeholders. Applies tools to identify the relevant risks and opportunities within their organizational context and investigates potential responses. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership or Master of Sustainability Leadership major; Corequisite(s): EMS 503; Pre- or corequisite(s): EMS 501 or SOS 501 |

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| EMS | 503 | Strategic Sustainability I | Sustainability requires that strategic thinking reaches beyond traditional forms and horizons of strategic planning, such as forecasting and prediction, in order to deal with expanded planning dimensions, emerging "wicked problems" and to identify flexible platforms for success. Explores the interface between strategy and sustainability, developing a framework for strategic sustainability that underpins authentic and transparent strategic efforts. Students engage in mapping, planning and prioritizing methods, tools and techniques to identify and assess strategic opportunities. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): Executive Masters for Sustainability Leadership or Master of Sustainability Leadership major; Corequisite(s): EMS 502; Pre- or corequisite(s): EMS 501 or SOS 501 |
| EMS | 504 | Communications and Sustainability I | One of the greatest challenges for leadership in sustainability is multidisciplinary communications. Currently, sustainability itself lacks meaning and emotion, which leads to a lack of commitment and execution. Therefore, all future executives must be proficient communicators who can convey vision and human context to the organization's sustainability initiatives. Helps you survey your internal communications environment, understand students target audiences and their unique customer centricities and develops their voices through the use of proven story structure. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 505 |
| EMS | 505 | Sustainability Leadership I | The practice of leadership in sustainability requires leading in multidisciplinary roles across multiple scales of an organization. In many of today's organizations, leadership must identify, communicate and support novel organizational contexts as sustainability emerges. Enables students to meld powerful and traditional leadership skills while challenging the student's prior knowledge with multiple lens of leadership in a sustainability context. Students create a personal plan for their unique needs and personal growth toward sustainability leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 502, 503. Corequisite(s): EMS 504 |
| EMS | 506 | Global Context II | As material sustainability issues are identified and prioritized and as the organization applies sustainability as core success platform, the organization looks to mitigating risks outside of its control, shaping the risks it can control, and creating new opportunities and leveraging those identified in the process. Global context comes into focus not only in expanding resource relationships and concerns, but also across dimensions of time, responsibility, success and a growing need to engage with an ever-growing group of stakeholders and potential partners. Organizations and leaders must innovate and execute at all levels of the organization to match the evolving reality. Explores and applies global sustainability as a knowledge platform for ongoing success, organizational innovation and effective organizational leadership. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505; Corequisite(s): EMS 507 |
| EMS | 507 | Strategic Sustainability II | As sustainability becomes a core strategic goal of any organization, it impacts all aspects of the organization from informing risk and reward to the definitions and dimensions of innovation and overall success. Uses reframing, re-visioning and backcasting via a sustainability lens as constructs for introducing strategic sustainability across all aspects of an organization--both internally and externally. Applies various methods such as natural capitalism, design for sustainability/method of sustainable product design, Anderson method, cradle-to-cradle and framework for strategic sustainable development to develop flexible action platforms for sustainable enterprises. Students create a strategic vision, action plan for an organization, including critical external partnerships with communities and institutions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 504, 505. Corequisite(s): EMS 506 |
| EMS | 508 | International Immersive | The international immersive experience takes place in a compelling location where all the challenges and opportunities of sustainability are in play. It is designed as a dynamic vehicle to make real-world connections to sustainability leaders, projects and communities, and is among the most memorable experiences of the program. Students "see" and "feel" sustainability from another country and culture's perspective and see the overlap and conflict to their own context. Extending one's professional network to other host countries and generating a reflective experience and analysis report are experiential learning artifacts that are generated from this experience. Collaborative teams work through a sustainability case study and present their solutions. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506, 507 |

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| EMS | 509 | Communications and Sustainability II | Marketing and communication professionals in all industries are attempting to keep up with the rapidly expanding landscape of multichannel communications. This is especially true in sustainability, given that the Chief Sustainability Officer must understand and appreciate the modes of communications across all platforms, not just in the consumer market. Maps internal, external and target audiences/markets; strategizes channels to reach them with sustainability stories; and creates a multichannel communications plan that incorporates modes of engagement for all audiences. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506; EMS 507; Corequisite(s): EMS 510 |
| EMS | 510 | Sustainability Leadership II | As sustainability emerges as a core strategic platform for an organization, leadership and sustainability intertwine; leadership opportunities—and responsibilities—greatly expand; thus requiring innovation. Individual leadership and organizational leadership are asked to find opportunity via extended definitions of critical systems; value webs, increased roles for diverse internal and external partnerships, and the need to lead within increasingly complex and unpredictable global systems. Engage students to challenge their prior definitions of systems, responsibility and community from the perspective of sustainability and leadership and provides a toolbox for leading with sustainability as a fundamental success platform. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 506; EMS 507; Corequisite(s): EMS 509 |
| EMS | 511 | Global Context III | Sustainability leaders help their organizations recognize when material issues require solutions that extend beyond their control or capabilities, and when to look for, participate in and potentially lead industry, cross-industry, regional or other collaborative approaches. Global sustainability context becomes an increasingly proactive concept where individual and organizational responsibility and success extends to a global scale. Organizations organize themselves as agents of change toward sustainability that aligns with more traditional organizational success. Students learn from successes and failures of current and past attempts and assess the implications for this change in leadership perspective to their organizational context. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 512 |
| EMS | 512 | Strategic Sustainability III | Organizations that aim at sustainability come to recognize that they must be part of sustainable success on all scales, from local to global, from internal to external and for today and tomorrow. Tools such as resource plans, investment pathways, stakeholder engagement and policy influencers set the theatre for sustainability-oriented organization to challenge the status quo and advance agendas that embed both success and sustainability. Students apply their enhanced strategic sustainability skills to examine select case studies on international sustainability in corporate and nongovernmental agencies. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 509, 510. Corequisite(s): EMS 511 |
| EMS | 513 | Communications and Sustainability III | Most stories of sustainability are driven and told with data as its central character. Unfortunately, data is nearly meaningless to our minds unless it is placed in an illuminating human context. The best chief sustainable storytellers bring meaning to data through the use of metaphor brought to life by thought-provoking narrative. Story grips the mind and propels people forward. Students develop proof of concepts for campaigns, expand social media presence and influence, create and record a 20-minute presentation in the style of a TedTALK, and become a leader in sustainable communications. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 514 |
| EMS | 514 | Sustainability Leadership III | Lasting, sustainable change fully takes hold once ownership and accountability extends well into the organization and community. Engages the student to identify and apply pathways to inspire, persuade and influence others to act toward a shared global vision. Future orientation, reframing organizations to be globally scalable and still be locally focused, leadership best practices for diverse, multinational, and international human talents and redefining success and growth using sustainability as a success lens are great tasks that sustainability leaders face. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 511, 512. Corequisite(s): EMS 513 |
| EMS | 515 | Capstone I | Capstone project and gateway to starting innovative sustainability initiatives and thinking. Planning, components and deliverables of the capstone from the first in-person immersion in January. Students perform a proof of concept to show viability and applicability that serves as a springboard for postgraduation continuation of capstone project into their organizations; environments. The proof of concept also becomes the final component of the e-portfolio. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): EMS 513, 514 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| EMS | 516 | Capstone II - Sustainability Leadership Workshop II | Develops a proof of concept based on project proposal and feasibility study. Requires a TED-style final project presentation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): EMS 515 |
| EMS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EMS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 101 | First-Year Composition | Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score 560PBT/250CBT/100iBT or higher; IELTS score >=6.5; ACT ENG score 19 or higher; SAT Verbal score >=470; Accuplacer score 5-7 (unless taken prior to May 12, 2009, then score of 8-10); or WAC 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 102 | First-Year Composition | Critical reading and writing; emphasizes strategies of academic discourse. Research paper required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 105 | Advanced First-Year Composition | Concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): English Placement Exam requirement: ACT English score of 26 or above OR SAT Verbal score of 620 or above OR Accuplacer11+ (prior to 05/09) or 8+ (new). Credit is allowed for only ENG 101 or ENG 105 |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 107 | First-Year Composition | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): TOEFL score of 560PBT/220CBT/83iBT or above; IELTS score of 6.5 or above; ACT English score 19 or above; SAT Verbal score of 470 or above; or Accuplacer score of 5 or above (unless test taken prior to May 12, 2009, then score 8 or above) |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 108 | First-Year Composition | For students for whom English is not the native language. Critical reading and writing; emphasizes strategies of academic discourse. Research writing required. Satisfies graduation requirement of ENG 102. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 101 or 107 with C or better |
| ENG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |

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| ENG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): freshman standing; maximum 25 hours |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| ENG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 200 | Critical Reading and Writing About Literature | Introduces the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| ENG | 201 | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 201 | World Literature | Classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 202 | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 202 | World Literature | Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 204 | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 204 | Introduction to Contemporary Literature | Poetry, fiction, drama, and possibly other genres. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 205 | Introduction to Writing, Rhetorics and Literacies | How do we understand the ways in which people in systems--both small and large--social, political, and economic, throughout the world use language and other symbolic resources to carry out work? Three fields of study take this kind of questioning especially seriously: studies in writing, studies in rhetoric, and studies in literacy. Inquiry--that persistent, deliberate commitment to question and to build methods sufficient to that questioning--is a generative force in each of these fields of study. Familiarizes students with such questioning traditions and to help them judge for themselves what each is good for. The goal is to strengthen your own repertoire and decision-making power for producing and circulating work (widely defined across material, print, and digital media) that matters in our risk-ridden world. Quite simply, then, this is a course in asking good questions and in evaluating responses to situations that spur questioning. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 207 | Elements of English Language and Cultures I | English communication and cultural awareness for international users of English. Relies on the many contexts of English use around the world to teach aspects of grammar, reading, writing, listening and speaking. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 107; ENG 108 |
| ENG | 208 | Elements of English Language and Cultures II | English communication and cultural awareness for international users of English. Relies on the many contexts of English use around the world to teach aspects of grammar, reading, writing, listening and speaking. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 107 with C or better; ENG 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 210 | Introduction to Creative Writing | Beginning creative writing in genres other than poetry and fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 213 | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 213 | Introduction to the Study of Language | Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 214 | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 214 | English Grammar and Usage | Fundamentals of English grammar (word and phrase structure), English usage (punctuation, grammatical correctness), and grammatical and usage theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 215 | Strategies of Academic Writing | Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 216 | Persuasive Writing on Public Issues | Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 217 | Writing Reflective Essays | Critical examination of the influences discourse has on formation of identity; narrative analyses of self and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 218 | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 218 | Writing About Literature | Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 219 | Newspaper Production | Students work on campus newspaper to learn basics of news and column writing, digital photography, and layout. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 221 | Survey of English Literature | Medieval, Renaissance, and 18th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 222 | Survey of English Literature | Romantic, Victorian, and 20th-century literature. Emphasizes major writers and their works in their literary and historical contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 228 | Introduction to Shakespeare | | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 228 or 294 (Shakespeare for Teachers) OR (Introduction to Shakespeare) |
| ENG | 229 | Love and Lust in Medieval Literature | The medieval period, roughly 600-1500, cannot reasonably be called the "dark ages." Indeed, the Middle Ages provides us with a corpus of literature replete with complex characters struggling to live and love, dealing with sin and lust, unity and diversity, faith and reason within a tumultuous cultural milieu and religious rigor, all of which are feeling the winds of changes. Explores medieval literature, noting the astonishing differences from our own time, as well as surprising similarities. Western civilization, our own 21st century, for better or for worse, is indebted to the love and lust of the medievals. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; credit is allowed for only ENG 229 or 294 (Love and Lust in Medieval Lit) |
| ENG | 230 | Introduction to Film Studies | Introduces the style and cultural significance of feature films. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 241 | Literatures of the United States to 1860 | Surveys literary movements and genres from colonization to the Civil War. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |
| ENG | 242 | Literatures of the United States, 1860 to Present | Surveys literary movements and genres from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre/corequisite(s): ENG 200 with C or better if completed |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------|
| ENG | 243 | Introduction to Writing Family History | Interdisciplinary writing course on theories, methodologies, and issues in writing family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 244 | Introduction to Researching Family History | Introduces research methods in family history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 245 | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 245 | Popular Culture Issues | Selected topics in various forms of popular culture related to written texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 287 | Beginning Creative Writing Workshop in Poetry | Beginning writing of poetry. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 288 | Beginning Creative Writing Workshop in Fiction | Beginning writing of fiction. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student; ENG 102, 105 or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 301 | Writing for the Professions | Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 302 | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 302 | Business Writing | Advanced interdisciplinary writing course designed to improve the workplace writing competence of W. P. Carey School of Business professional and preprofessional students. Lecture, discussion, case studies, cooperative learning, interactive, Internet, student presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 303 | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 303 | Classical Backgrounds of English Literature | Readings of Greek and Latin literature in translation as they relate to literature in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 305 | Classical and Biblical Backgrounds to Literature | Selected readings from the Bible and Greek and Latin literature in translation, emphasizing ideas, forms, and myths related to the development of English literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 307 | Writing Science Fiction | Writing science fiction, primarily the short story. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 310 | Intermediate Creative Writing | Intermediate creative writing in genres other than poetry, fiction, or science fiction. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 210 with C or better |
| ENG | 311 | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 311 | Persuasive Writing | Advanced writing course that focuses on persuasive writing for diverse audiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 312 | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 312 | English in its Social Setting | Introduces the sociolinguistic study of the English language. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 313 | Phonology and Morphology | Introduces English morphology, phonology, etymology, and phonetic aspects of rhyme, alliteration, and other sound-based literary devices. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 314 | Modern Grammar | Modern descriptive models of English grammar. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 315 | Medieval Literature in Translation | Medieval literature (insular and continental) in translation, from Beowulf to Malory (excluding Chaucer), emphasizing cultural and intellectual backgrounds. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| ENG | 317 | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 317 | Cross-Cultural Writing | Cultural differences and their impact on writing and/or their role in miscommunication and misinterpretation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 320 | Medievalism in Modern Culture | Studies the representation of Medieval narratives, characters, themes, myths, and images in modern culture. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 320 | Medievalism in Modern Culture | Studies the representation of Medieval narratives, characters, themes, myths, and images in modern culture. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 321 | Shakespeare | Readings in Shakespeare's major comedies, tragedies, histories, romances and/or poems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 323 | Rhetoric and Grammar | Practical course taught in the computer lab. Emphasizes rhetorical strategies and grammar for writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 325 | Restoration and the 18th Century | Writers and movements in nondramatic literature of the restoration and early 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 326 | English Drama 1660-1800 | English drama 1660-1800. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 328 | The Novel to Jane Austen | From origins of prose fiction through the 18th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 329 | 19th-Century British Fiction | Includes such authors as Austen, Dickens, Eliot, and Conrad. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 330 | 19th-Century British Poetry | Romantic and Victorian poets studied in context. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 331 | American Drama | Major works in the development of American drama from its beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 333 | American Ethnic Literature | Examines America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 333 (or AFH 333) or ENG 333 |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 334 | The American Southwest in Literature and Film | Evaluates literary texts and films addressing the diverse literatures and cultures of the American Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 335 | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 335 | American Poetry | Themes and developments in American poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 337 | Major American Novels | Major American novels studied in their ethnically diverse literary, historical, and cultural contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 338 | Protest Literature | Examines traditions of social protest literature across a variety of historical periods and literary and rhetorical genres. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, ENG 105, or ENG 108 with C or better; minimum 24 earned hours; credit is allowed for ENG 394 (Banned Literature), 338 or 440 (American Protest Novels) |
| ENG | 342 | 20th-Century British and Irish Literature | Major works in the development of literature since 1900, studied in their historical and cultural contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 344 | Intermediate Family History Research | How to locate records, analyze and interpret evidence, and write a family history narrative. | N | RSC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 345 | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 345 | Selected Authors or Issues | Different topics may be offered. Film topics with lab may carry 4 credits. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 352 | Short Story | Development of the short story as a literary form; analysis of its technique from the work of representative authors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 353 | African American Literature: Beginnings through the Harlem Renaissance | Focuses on the history of African American literature through the Harlem Renaissance, as exemplified in selected slave narratives, poems, and fiction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 353 (or AFH 353) or ENG 353 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 354 | African American Literature: Harlem Renaissance to the Present | Examines the literary productions of African Americans from the Harlem Renaissance (about 1920) to the present focusing on fiction, poetry, drama, and essays. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only AFR 354 (or AFH 354) or ENG 354 |
| ENG | 355 | European Dramatic Traditions | Development of European drama since Aeschylus. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 356 | The Bible as Literature | Readings in the Jewish and Christian Scriptures in modern translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 359 | Indigenous American Literature | Selected oral traditions and contemporary works by Indigenous American authors. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 360 | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 360 | Western American Literature | Critical examination of ideas and traditions of the literature of the western United States, including the novel. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 361 | Scriptwriting | The art of scriptwriting using 10-minute plays as the platform. Designed to help students learn craft techniques and to expose them to the various forms of the 10-minute script. Includes lectures, writing assignments, discussion, and criticism. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): first-year composition; credit is allowed for only ENG 361 or 394 (Scriptwriting) |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only ENG 363 or TCL 363 |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only ENG 363 or TCL 363 |
| ENG | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only ENG 363 or TCL 363 |
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|--------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------|
| ENG | 364 | Women and Literature | Approaches to issues of gender and representation in literature by and about women. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 365 | History of Film | Development of motion pictures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-4 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 366 | Literature on Film | Studies literary texts and their adaptation to film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 367 | Environmental Issues in Literature and Film | Evaluates literary texts and films that address interconnected cultural, historical, and environmental issues. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 367 | Environmental Issues in Literature and Film | Evaluates literary texts and films that address interconnected cultural, historical, and environmental issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 368 | Art of the Personal Essay | Writing personal essays drawing on both research and personal experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 369 | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 369 | Science Fiction Studies | Development of science fiction and fantasy literature. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 370 | Science, Values, and the Public | Examines science, communication, and a range of public opinion to understand science as a discourse of profound social power. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; must have 35 or more earned hours; credit is allowed for only BIO 315 or ENG 370 |
| ENG | 371 | Rhetoric of the Environmental Movement | Examines how language is used to conceptualize, clarify/obfuscate, and resolve problems among those who concern themselves with the disposition of natural resources. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 372 | Document Production | Introduces document design and production. Practice in critique and in writing the content of publications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 373 | Publishing in Literary Magazines | Analyzes the history, publishing preferences, editorial staff, and submission guidelines of literary magazines. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 374 | Technical Editing | Fundamentals of editing technical and professional materials. Role of editors in analyzing, revising, and polishing manuscripts. Successful writer-editor dialogues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 375 | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 375 | Titans of Business | Explores leading CEOs and corporations from a humanities perspective. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 376 | Writing a Personal History | Interdisciplinary writing course emphasizing theories, methodologies, and issues of composing personal histories. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 377 | Editing Family History for Public Audiences | Fundamentals of editing family writing. Role of editors in analyzing, revising, and polishing manuscripts for publication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 378 | Environmental Creative Nonfiction | Lectures, discussion, and criticism concerning the literary history of nature writing and techniques of writing environmental creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 378 | Environmental Creative Nonfiction | Lectures, discussion, and criticism concerning the literary history of nature writing and techniques of writing environmental creative nonfiction for publication. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 379 | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 379 | Travel Writing | Studies the genesis of travel writing, what theories inform travel writing, and the various genres of travel writing today. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 382 | Digital Project Management for Humanities | Introduces Web design for the humanities; explores the use of the ADDIE process to create digital projects. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 383 | Digital Media in the Humanities | Introduction to the digital arts is an introduction to the emerging "new media" with emphasis on still imaging, audio, video, multimedia and the World Wide Web. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 385 | Career Development for English Majors | Theoretical and practical aspects of career planning related to skills and interests developed in English studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 386 | American Gothic | The development of modern American Gothic as a literary form from Poe to Oates. Emphasizes the short story. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 387 | Intermediate Creative Writing Workshop in Poetry: Form, Theory, and Practice | Intermediate writing of poetry. Requires term paper or equivalent out-of-class written work. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 287 (Poetry) with C or better; credit is allowed for only ENG 310 (Intermediate Poetry) or ENG 387 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 388 | Intermediate Creative Writing Workshop in Fiction: Form, Theory, and Practice | Intermediate writing of fiction. Requires term paper or equivalent out-of-class written work. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 288 (210: Fiction) with C or better; credit is allowed for only ENG 310 (Intermediate Fiction) or ENG 388 |
| ENG | 390 | Methods of Inquiry | Studies in writing, rhetoric and literacy are multiple and diverse because these areas deal with complicated ways people create meaning, circulate meaning, and understand meaning in a variety of contexts and a variety of modal formats. Examines ways of developing research problems and questions, designing studies and conducting, reading and evaluating research in the areas of writing, rhetoric and literacy. Qualitative methods (e.g., case study, ethnographic methods, interviewing); historical methods (e.g., archival, document analysis and artifact interpretation); rhetorical analysis and discourse analysis; feminist approaches to research and analysis; and recent advances in research in the fields of rhetoric, writing and literacy studies. Investigates the many attitudes and assumptions about creativity and cultural work that make methods of inquiry as controversial as they are significant to contemporary public life. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 391 | Writing in Context | How do we understand the ways in which people use written language to carry out work in professional, academic, social and/or personal contexts? How does our understanding of the ways writing is produced for an audience shift between and among these different contexts? More importantly, how do writers adapt their writing practices in order to facilitate audience understanding as well as cultivate an audience's capacity for action? Familiarize students with rhetorical practices that position them to read, assess and respond to the rhetorical demands of a wide range of writing contexts. Strengthens students' existing rhetorical skill sets and problem-setting capacities for producing and circulating work (widely defined across material, print and digital media) that responds to a range of problems in an applied manner. Assesses the rhetorical demands of writing contexts and in developing and producing tailored, audience-specific texts that forward work in complex, interdisciplinary environments. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 392 | History of Rhetorical Theory | Begins in ancient Greece with the rise of the art of public oratory (known as rhetoric) and ends in the present, an era dominated by mass media. Engages in a great deal of reading—lots of very old writings as well as some newer ones. Covers a great many topics and ideas; focuses by continually returning to the subject of public discourse. Challenging readings designed to emphasize the connection between systems of philosophy (or "worldview") and systems of communication. By focusing on big ideas, students become a better thinker and communicator in any chosen career. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 393 | Theories of Literacy | While theories of literacy have, for the most part, been determined by the primacy of reading and writing script, more recent scholarship in literacy theory and history has served to challenge such limitations. Many contemporary perspectives on literacy view scripted text as one component of complex acts and practices of written communication that occur in social contexts. Studies that examine such communicative acts in their local contexts reveal that literate practices and the texts that are produced are imbued with social and cultural values and traditions and the needs and desires of individuals. As the statements above illustrate, theories of literacy themselves are embedded within the values and assumptions of individuals, institutions, and academic specialization. Examines some of these theories, their influences on academic scholarship and pedagogy, the ideological assumptions that inform them, and how we might view these theories within broader social-cultural landscapes. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| ENG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 400 | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |
| ENG | 400 | History of Literary Criticism | Major critics and critical traditions in the Western world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & H | Prerequisite(s): ENG 200 & one 200-level literature course with C or better, OR Letters and Sciences undergrad student; minimum junior standing & one 200-level (or higher) ENG course with C or better, OR New College undergrad major with minimum 45 hours |
| ENG | 401 | Topics in Critical Theory | Major critical schools of recent decades--postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 401 | Topics in Critical Theory | Major critical schools of recent decades--postcolonialist, psychoanalytic, deconstructionist, feminist, new historicist. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 403 | Semantics | Program and methods of contemporary formal semantics. Characterizes knowledge of meaning as knowledge of truth conditions. The goal of semantics is thus to uncover the rules that allow the speakers of a language to know under what conditions any sentence is true; or in other words, to construct a theory of truth for natural language. Simple fragments including: predication, quantification, definite descriptions, simple temporal and modal expressions, and attitude verbs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 314 with C or better; Credit is allowed for only ENG 403 or ENG 414 |
| ENG | 404 | Studies in Second Language Acquisition | Specialized topics in second language teaching and learning, including theory, pedagogy, curriculum, and assessment. | Y | LEC | Y | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |
| ENG | 410 | Writing for Publication | Lectures and conferences concerning techniques of writing for publication. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 200 and one 200-level literature course with C or better, OR New College undergraduate student with minimum 45 hours |
| ENG | 411 | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | 411 | Advanced Creative Writing | Advanced creative writing in genres other than poetry, fiction, creative nonfiction, or screenwriting. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310 with C or better |
| ENG | 412 | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | 412 | Creative Nonfiction | Lectures, discussion, and criticism concerning techniques of writing creative nonfiction for publication. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 310, 388 or 411 with C or better |
| ENG | 413 | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | 413 | History of English Language | Development of English from the earliest times to the modern period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 and one 200-level literature course OR New College undergraduate student with minimum 45 hours. Credit is allowed for only ENG 413 or LIN 517 |
| ENG | 414 | Studies in Linguistics | Specialized topics in linguistics including phonology, syntax, semantics, pragmatics, discourse, language variation, and change. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and 213 with C or better OR 1 year language study and minimum 56 hours |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 415 | Studies in Medieval Literature and Culture | Medieval English and continental literature in translation, emphasizing cultural and intellectual backgrounds. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 416 | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Troilus and Criseyde. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | 416 | Chaucer in Middle English | Yearly alternate between Chaucer's The Canterbury Tales and Troilus and Criseyde. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate with minimum junior standing and one 200-level (or higher) English course with C or better |
| ENG | 418 | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 418 | Renaissance Literature | Prose, poetry, and drama of the Renaissance Era with an emphasis on cultural history. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| ENG | 421 | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 421 | Studies in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 422 | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 422 | Special Topics in Shakespeare | Close examination in selected dramatic and/or nondramatic works. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 423 | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 423 | Renaissance Drama | Topics, authors, and themes in the drama of the Tudor and early Stuart periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 424 | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 424 | Milton | Selected prose and poetry, emphasizing Paradise Lost, Paradise Regained, and Samson Agonistes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 425 | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 425 | Studies in Romanticism | Romanticism in continental, British, and American literature and culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 426 | British Culture and Empire | Examines British imperial culture in art and literature, 1870-1914, and postcolonial theory. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: One course in ARS, ENG, or HST at 200 level or higher with B or better |
| ENG | 427 | Studies in 18th-Century Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 428 | The Pre-Raphaelites | Visual and literary works by Victorian Pre-Raphaelites as works in themselves and through relations between images and texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre/Co-requisites: one course in ARS, ENG or HST at 200 level or higher with B or better. Credit is allowed for only ARS 435 or ARS 533 or ENG 428 |
| ENG | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| ENG | 430 | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 430 | Studies in Victorian Literature and Culture | Literary, social, and cultural issues of the period studied in an interdisciplinary format. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |

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| ENG | 431 | Whitman and Dickinson | Evaluates the 19th-century American Literary Renaissance through the specialized examination of its poetry and authors in their historical context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 432 | The American Renaissance | Novels, poetry, short fiction, and criticism of the major literary figures of the early to mid-nineteenth century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 433 | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 433 | Southern Writers | Analyzes Southern culture through the eyes of the region's novelists, short story writers, poets, filmmakers, photographers, and song writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 434 | Studies in the Literature and Culture of the Americas | Literature and culture of North America, South America, and the Caribbean. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 435 | Literatures and Cultures of Immigration and Diaspora | Specialized topics in literary and cultural representations of immigration and diaspora studied in an interdisciplinary context. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: A 200-level ENG course with C or better; Minimum 56 hours |
| ENG | 436 | Studies in Anglophone Literature and Culture | Literary, social, and cultural issues of English-speaking former colonial territories. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 437 | The American Novel, 1900 - 1960 | Developments in theory and practice of major novelists. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 438 | American Novel Since 1960 | Major novelists of the period. Developments in theory and practice. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 440 | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 440 | Studies in American Literature and Culture | Various genres in their literary, political, theoretical, and historical contexts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 442 | Studies in 20th-Century British and Irish Literature and Culture | Major literary genres (novel, poetry, and drama) in their cultural and historical contexts. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 444 | Studies in American Romanticism | Fiction, poetry, and essays of such 19th-century authors as Hawthorne, Emerson, Melville, Thoreau, Fuller, Whitman, and Dickinson. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 445 | Studies in American Realism | Writers and influences that shaped the development of literary realism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 447 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| ENG | 448 | Studies in Irish Literature and Culture | Themes and problems pertaining to Irish literature, film, and social and cultural history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 450 | The British Novel | Focuses on the British novel from the 18th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 452 | Studies in the Novel | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 453 | Studies in the American Novel | Poetics and politics of the novel, 18th through 21st centuries. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 454 | Gender and Literature | Focuses on the representation of gender in literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 455 | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 455 | Contemporary Women Writers | Critical examination of literature by contemporary women writers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 457 | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |

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| ENG | 457 | Studies in American Poetry | May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits |
| ENG | 458 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| ENG | 459 | Studies in African American/Caribbean Literatures | Studies in African American or Caribbean literatures according to genre, period, theory, or selected authors. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & G | Prerequisite(s): ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only AFR 459 (or AFH 459) or ENG 459 |
| ENG | 460 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Hispanic, and Asian American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 460 or WST 467 |
| ENG | 461 | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 461 | Studies in Women and Literature | Advanced topics in literature by or about women. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 462 | Africana Literature | Focuses on the literature of the African Diaspora, including texts from the Caribbean, the Americas, and Africa. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 463 | African American Literature | Thematic and cultural study of African American literature. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 464 | Great Directors | Studies the work of one or more influential directors. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 465 | Studies in Film | Advanced topics in cinema. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 466 | Studies in International Film | Studies non-American narrative film. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 467 | American Film Musicals | A cultural history of American film musicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 468 | Environmental Literary Criticism | Evaluates the disparate critical practices that constitute what is the emerging literary project known as "ecocriticism" or "environmental literary criticism." | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 468 | Environmental Literary Criticism | Evaluates the disparate critical practices that constitute what is the emerging literary project known as "ecocriticism" or "environmental literary criticism." | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 469 | Science and Literature | Historical and theoretical links between science and literature, from Francis Bacon to the present, examined in cultural context. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better |
| ENG | 470 | Symbols and Archetypes in Children's Literature | Various critical approaches and recurring themes studied in relation to classical and contemporary children's literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 200 with C or better; one 200-level lit course with C or better, OR Letters and Sciences undergrad with minimum 56 hours and one 200-level (or higher) English course with C or better, OR New College undergrad with minimum 45 hours |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 200 with C or better; one 200-level lit course with C or better, OR Letters and Sciences undergrad with minimum 56 hours and one 200-level (or higher) English course with C or better, OR New College undergrad with minimum 45 hours |
| ENG | 471 | Literature for Young Adults | Prose and poetry that meet the interests and capabilities of junior high and high school students. Stresses recent literature. A passing grade of at least "C" (2.00) required before students are permitted to student teach in English. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 200 with C or better; one 200-level lit course with C or better, OR Letters and Sciences undergrad with minimum 56 hours and one 200-level (or higher) English course with C or better, OR New College undergrad with minimum 45 hours |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 472 | Rhetorical Studies | Developments in theory and practice of major rhetorical inquiries. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 474 | Review Writing | Advanced writing course exploring rhetorical approaches to writing reviews. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Completed ENG 102, 105, or 108 with C or better; Minimum 56 hours |
| ENG | 475 | Popular Periodical Writing | Advanced writing course analyzing and imitating genres in popular periodical writing. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: Completed ENG 102, 105, or 108 with C or better; Minimum 56 hours |
| ENG | 476 | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 476 | Studies in Folklore | Surveys the history, genres, and dynamics of folklore, with emphasis on oral traditions. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 477 | World Literature | Readings in world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |
| ENG | 478 | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 478 | Studies in Modernism | Cultural, historical, and literary issues in American and European modernism. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 479 | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 479 | Studies in Postmodernism | Literary, social, and cultural topics in postmodernism. May be repeated for credit when topics vary. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 480 | Methods of Teaching English: Composition | Methods of instruction, organization, and presentation of appropriate content in the teaching of composition and other writing skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 102, 105, or 108 with C or better and one other ENG course with C or better |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 482 | Methods of Teaching English: Language | Methods of instruction, organization, and presentation of appropriate content in language and usage for junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Pre-requisites: ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours |
| ENG | 483 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 200 with C or better and one 200-level literature course with C or better OR New College or Letters and Sciences undergraduate student and minimum junior academic level and one 200-level (or higher) English course with C or better |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 485 | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better |
| ENG | 485 | Digital Tools | Digital (online, electronic) tools as best utilized in language arts curriculum and instruction for junior and senior high schools. Addresses many practical classroom matters; broadens knowledge of Web 2.0 opportunities for teaching and learning. Creates a detailed inventory of the digital tools familiar to secondary students, and compares these to what a clever English teacher can access in a public school classroom. Imaginations, studies, and designs digital tools to enhance student achievement. Uses digital tools to increase student access to history and culture and opportunities for individuals to find and articulate their voices, as well as opens avenues for their creativity. Empowers the English language arts classroom with critical understandings of media, culture and public relations (digital information manipulation) and develops secondary students from passive consumers to literate participants in democracy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better |
| ENG | 486 | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) |
| ENG | 486 | Teaching Text | Approaches to texts (poetry, nonfiction and fiction) as best utilized in language arts curriculum and instruction for junior and senior high schools. Language arts teachers want all of their students to love literature and become immersed in the texts they assign (poems, short stories, plays, nonfiction and informative texts, and novels). Explores activities and philosophies for building a strong reading workshop in the secondary language arts classroom. Through identifying proficient readers, conducting thoughtful conversations about students and reading, and using a variety of ways to invite readers into books, designs and experiences reading workshops based on innovative and effective teaching strategies. Offers hands-on strategies for supporting struggling readers and for teaching reading from a critical lens. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course with C or better; Credit is allowed for only ENG 486 or 598 (Teaching Text) |
| ENG | 487 | Advanced Creative Writing Workshop in Poetry | Advanced writing of poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 387 (Poetry) with C or better; Credit is allowed for only ENG 411 (Poetry) or 487 |
| ENG | 488 | Advanced Creative Writing Workshop in Fiction | Advanced writing of fiction. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 388 (Fiction) with C or better; Credit is allowed for only ENG 411 (Fiction) or 488 |
| ENG | 489 | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 489 | Culturally Sustaining Pedagogy | Methods of designing and implementing culturally responsive secondary curriculum and instruction using students' cultural backgrounds and languages as an asset in the teaching of English language arts. Students gain a repertoire of techniques and sources for curriculum content, instruction design and assessment techniques in the English language arts that capitalizes on the students' prior knowledge and includes community input and collaboration. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA in English (Secondary Education) major; ENG 102 (or 105 or 108) and one other ENG course |
| ENG | 490 | Literary Forms: Theory and Practice in Poetry | Types, history, analysis of traditional forms, and contemporary adaptations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 487 (Poetry) with C or better; Credit is allowed for only ENG 490 or 495 (Poetry) |
| ENG | 491 | Literary Forms: Theory and Practice in Fiction | Types, history, analysis of traditional forms, and contemporary adaptations. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 488 (Fiction) with C or better; Credit is allowed for ENG 491 or 495 (Fiction) |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| ENG | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 501 | Approaches to Research | Theories, methods and/or methodologies as well as qualitative and/or quantitative approaches to the specific discipline. Familiarizes students with the areas of research. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 501 or LIN 501 |
| ENG | 502 | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 502 | Contemporary Critical Theories | Studies the principles and techniques of contemporary theory and criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 504 | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 504 | Cross-Cultural Studies | Theoretical and analytical issues for comparative research across distinct cultural regions and traditions. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 506 | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 506 | Methods and Issues in Teaching Language | Developing the language skills of native and non-native speakers through a process approach and advanced writing workshops in junior and senior high schools. | N | REC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 507 | Methods and Issues in Teaching Composition | Up-to-date theory, practice, and implementation of secondary writing instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| ENG | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional contexts as well as the characteristics of different types of students and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)/Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| ENG | 530 | Old English | Study of Old English grammar, syntax, and phonology, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 531 | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 531 | Old English Literature | Intensive literary, linguistic, and cultural study of Old English literature. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 532 | Middle English Dialects | Study of the principal dialects of Middle English, with selected readings. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 533 | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 533 | Studies in Medieval Literature | Selected topics in English literature from the 11th through the 15th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 534 | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 534 | Studies in Renaissance Literature | Selected topics and literary works studied in the contexts of English Renaissance culture. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 535 | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 535 | Studies in 18th- and 19th-Century British Literature | Selected topics, issues, figures, and genres in British literature and culture of the 18th and 19th centuries. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 536 | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 536 | Studies in American Literature before 1900 | Selected topics, issues, figures, and genres in 17th-, 18th-, and 19th-century American literature, including the literature of conquest and contact. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 537 | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 537 | Studies in Modern and Contemporary British Literature | Selected topics, issues, figures, and genres in British literature and culture after 1900. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 538 | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 538 | Studies in Modern and Contemporary American Literature | Selected topics, issues, figures, and genres in American literature and culture after 1900. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 539 | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 539 | Studies in Modernist and Postmodernist Literature and Theory | Selected topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 540 | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 540 | Teaching Young Adult Literature | Issues and new approaches in teaching contemporary literature in high school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 542 | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 542 | Studies in North American Ethnic Literatures | Selected works studied in their cultural contexts from authors representing ethnic experiences in the United States. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 544 | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 544 | Studies in Colonial and Postcolonial Literature | Selected topics, periods, theories, and figures in works by authors representing colonial and postcolonial regions and/or experiences. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 550 | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 550 | Translation | Surveys theories and practices of translation into English. Considers target, audience and market. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 551 | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 551 | Rhetorical Traditions | Examines rhetorical traditions spanning ancient to contemporary rhetorics. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 552 | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 552 | Composition Studies | Selected topics in the history and theories of composition. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 553 | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 553 | Technologies of Writing | Critical study and cultural analysis of information technologies and their effects on various writing practices. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 554 | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 554 | Rhetorics of Race, Class, and Gender | Study of interdependent relationships of race, class, and gender in rhetorical constructions of self and community. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 556 | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 556 | Theories of Literacy | Examines various theories of literacy, their embedded values and assumptions, and their influences on academic scholarship and pedagogy. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 557 | Computer-Assisted Language Learning | Explores the field of computer-assisted language learning. Traces the development of computer-assisted language learning (CALL) over the last three decades. Focuses on research that explores how computer technology can help facilitate second language development; relies primarily on empirical data to do so. Examine established as well as new research methods in CALL. Participants participate in one research study and apply theoretical and practical aspects of CALL in these projects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only APL 557, ENG 557 or LIN 591 (Intro to Computer Assisted Language Learning) |
| ENG | 560 | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 560 | Genre Studies | Critical analysis and study of works from a single genre or comparative analysis and study of multiple genres. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 561 | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 561 | Film Studies | Analysis and study of film genres, cinematic techniques, and problems of interpretation and representation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 562 | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 562 | forms of Poetry | Types, history, criticism, and schools of theory of metrical form. Analyzes lyric, narrative, and dramatic poetry. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 563 | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 563 | Forms of Fiction | Types, history, criticism, and schools of theory in the forms of fiction. Analyzes narrative and dramatic structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 571 | Foundations for Teaching English Learners | Provides teachers with foundational knowledge of English language learner education including: identification and knowledge of English language learners in school contexts, the role of culture in learning, principles of second language acquisition and teaching, historical and current perspectives and policies related to English learner education, and the role of parents and communities in the education of English learners. | N | LEC | Y | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 580 (1 hour); Credit is allowed for only ENG 571 or ENG 598 (Foundations for Teaching English Learners) |
| ENG | 572 | Strategies for Teaching English Learners | Supports teachers through a review of core knowledge of strategies and correlated assessments for the instruction of English learners. Teachers learn to assess EL language needs and apply appropriate teaching strategies for supporting learning English and content. Primary emphasis is in the integration of EL language and learning needs and implementation of lesson planning, strategies and appropriately leveled instruction. Teachers complete a semester-long inquiry on integrating course content into their teaching practices. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 571; Pre- or corequisite(s): ENG 580 (2 hours); Credit is allowed for only ENG 572 or ENG 598 (Strategy/Assessment/Core for Teaching Eng Learners) |
| ENG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 581 | Methods of Teaching Secondary Writing | Emphasizes methods of planning, teaching, and assessing appropriate content in the instruction of composition and related skills in secondary classrooms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only ENG 481 or 581 |
| ENG | 582 | Pedagogy | Overview of diverse theories of English instruction, including composition/rhetoric, linguistics and literary, with emphasis upon development and implementation for high school- and community college-level instructors. | N | SEM | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): admission to any graduate program |
| ENG | 583 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 583 | Methods of Teaching Secondary Literature and Language | Emphasizes educational methods of planning, teaching, and assessing appropriate content in the instruction of secondary literature, literacy, and language usage. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ENG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ENG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 597 | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 597 | Graduate Capstone Seminar | The capstone seminar is required for graduate students who must complete a culminating experience for a degree or certificate program. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 602 | Advanced Studies in Theory and/or Criticism | Seminar courses on the principles, strategies, and applications of critical, cultural, and/or literary theory and/or criticism. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 603 | Advanced Studies in Comparative Literature | Seminar courses on the problems, methods, and principles of comparative analysis. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 604 | Interdisciplinary Cultural Studies | Seminar courses on work from literature, anthropology, and/or other disciplines, with an emphasis on cultural influences and functions. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 606 | Advanced Studies in English Education | Current research, issues, and trends in English education. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing--an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ENG or LIN 625 |
| ENG | 632 | Advanced Studies in Medieval and Renaissance Literature and Culture | Seminar in works of the Medieval or Renaissance periods, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 635 | Advanced Studies in British Literature | Seminar courses on works produced in or about England, Scotland, and Wales, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 636 | Advanced Studies in American Literature | Seminar courses on works produced in or about the United States, studied in their cultural contexts. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 639 | Advanced Studies in Modernism and Postmodernism | Seminar courses on topics in Modernist and Postmodernist studies. May include literary and theoretical texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 642 | Advanced Studies in Ethnic, Anglophone, or Post-Colonial Literatures | Seminar courses that consider the influence of cultural or geopolitical developments on the production and circulation of texts. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 651 | Advanced Studies in History and Theories of Rhetoric | Selected topics in the history and/or theory of rhetoric. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 652 | Advanced Composition Studies | Selected topics on particular composition theories, practices, pedagogies, and figures. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 654 | Advanced Studies in Rhetoric, Writing, Technology, and Culture | Advanced study of theoretical, methodological, and pedagogical issues concerning the interrelationships among rhetoric, culture, writing, and writing technologies. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ENG | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to linguistics and applied linguistics. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 655 or LIN 655 |
| ENG | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 662 | Poetic Genres | Creative writing courses in the long poem, the erotic image, death and transfiguration, reading and influence, and others. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 664 | Mixed Genres | Creative writing courses in the prose poem, magical realism, the literature of obsession. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 665 | Creative Methods | Creative writing courses in theory of the novel, poetics, story into film, and others. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 667 | Issues in the Writing Professions | Focuses on career preparation, resources, the role of writing in the community, creative writing, and the Internet. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ENV | 201 | Fundamentals of Environmental Science | Examines the functioning of the earth system and how it has changed over long and short time scales. Emphasizes understanding global processes and how human activities can disrupt these processes, changing the ability of our global environment to support life. Also emphasizes important feedbacks between biological and physical processes and their effects on the biosphere. Discusses the response of natural and managed ecosystems to global change along with prospects for the future. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181 and 182 with C or better; CHM 116 with C or better |
| ENV | 310 | Soil Science | Fundamental principles of soil science, including physical, chemical, biological and ecological properties. Applies these principles to explain the importance of soil as both a natural resource and ecosystem. Discusses the role of soils as the heart of terrestrial ecosystems, both natural and managed, and the importance of this key natural resource to environmental health and biological productivity. Explores how human activity and global change are impacting this vital natural resource and ecosystem that is crucial to life on earth. The laboratory component also introduces applications and standard methodology for investigating these principles. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisite(s): BIO 320 with C or better; CHM 116 with C or better; PHY 101 or higher with C or better |

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| ENV | 345 | Spatial Analysis in the Environmental Sciences | Develops an understanding of the methods, tools and technologies used to collect, display, analyze and interpret spatial data in environmental science and natural resource management. Provides overview of geographic information system (GIS) applications in these fields. Basics of integrating the global position system (GPS) and remote sensing (RS) into GIS to solve problems in environmental science and natural resource management. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ENV 201 with C or better |
| ENV | 385 | Environmental Impact Assessment | An understanding of federal and state environmental laws, including the scientific processes that are incorporated into decision making, is critical for a variety of careers in the environmental sciences. Provides an overview of these laws and processes and develops the specific written and oral communications skills needed for many environmental, biophysical and natural science professions. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): ENV 201 with C or better |
| EPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 532 | Becoming an Informed Consumer of Educational Research | Development of critical analyses skills in the examination and synthesis of educational research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: EPA 555 |
| EPA | 555 | Translating Research for Educational Change | Teaches educators how to translate research to promote educational change in their schools and districts. Three concepts emerge to empower practitioners to translate research to their individual schools and communities: (1) a needs assessment to understand the context (student population, community, networks); (2) an emphasis on the generalizability of research to provide an understanding of which findings are most applicable to specific contexts at which times and under which conditions; and (3) explicit training on ways of knowing to encourage practitioners to develop their own theoretical perspectives and test them against the academic research. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 556 | Data Analysis for Education Decision Makers | Prepares educators to use the sources of information (i.e., results, reports and interactive programs) at their disposal to make educational decisions. Dynamic content is adapted based on the real-world information sources brought forth by the course participants. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 559 | Systematic Inquiry for Problem Solving | Trains participants to produce a policy analysis aimed at addressing a problem they identify within their own organizations. Participants identify a problem, gather, analyze data and evidence to draw conclusions, and clearly and succinctly report their findings and recommendations to policymakers. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 565 | Critical Topics in Education Policy | Critical topics in contemporary educational policy debates in the USA. Explores the dominant ideological and theoretical perspectives about what should be the purposes of schooling. Students analyze the humanist, core-curriculum, vocational, pragmatic as well as the standards-based, market-driven, professionally led, and networked models of reform, theories of change, implementation challenges, and the critiques leveled against these approaches. Students analyze critical topics such as policy formation, leadership, teachers unions, academic performance and community involvement. Encourages students to learn critical "policy skills" and reach reflexive and research-based conclusions about what are the requirements to develop "good school systems" and what their individual and collective contributions could be. | N | SEM | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | MaryLouFulton Teachers College | Dean, Mary Lou Fulton Teachers College | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |
| EPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| EPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 795 | Continuing Registration | | N | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Pre-requisite: EPD 710, 712 or 714 with C or better |

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| EPD | 710 | Current Research in Design | Review and critical evaluation of contemporary literature and research in design, environment and the arts. | N | SEM | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisite: Design, Environment and the Arts PhD OR Design, Environment and the Arts (Digital Culture in Design) PhD OR Environmental Design and Planning PhD OR Environmental Design and Planning (Healthcare and Healing Environments) PhD |
| EPD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EPD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 301 | Environmental Management | Focuses on knowledge and skills necessary to manage environmental programs. Perspectives include regulatory, individual, corporate, and consulting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 302 | Water and Wastewater Treatment Technology | Explores the development of treatment technologies. Addresses regulatory standards. Emphasizes theory and practice of system design, lab analysis standards and procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101; MAT 170, or MAT 210 |
| ERM | 303 | Environmental Regulations | Explores environmental laws, regulations, and directives. Addresses air, land, and water. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 364 | Toxicology and Biohazards in Emergency Management | Introduces poisons. Dose response routes of exposure and toxicokinetics. Diseases associated with natural disasters. Clinical presentation of treatments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 401 | Hazardous Waste Management | Definition of hazardous waste, RCRA and CERCLA regulations, hazardous waste classification system. Overview of hazardous waste management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 402 | Unit Treatment Technologies | Addresses various treatment technologies for contaminated air, water, and soil. Emphasizes design based upon medium, type of contamination, and concentration. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): CHM 101 (or 113); MAT 170 or higher |
| ERM | 406 | Environmental Chemistry | Examines reactions, transport, and fates of hazardous chemicals in water, soil, air, and living organisms. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: CHM 101 (or 113) and MAT 170 or higher |
| ERM | 407 | Occupational Hygiene | Overview of occupational health hazards, including recognition, evaluation, and control. Includes regulatory status and health standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| ERM | 426 | Environmental Issues | Explores the science and policy implications of contemporary problems that threaten the environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |

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| ERM | 428 | International Environmental Management | Emphasizes technological and economic pressures experienced by developing countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | |
| ERM | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): senior standing; Pre- or corequisite(s): GIT 413 or Applied Science (Graphic Information Technology) BAS major or Applied Science (Internet & Web Development) BAS major |
| ERM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| ERM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | | Prerequisite(s): Barrett Honors student |
| ERM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| ERM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | |
| ERM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| ERM | 501 | Principles of Hazardous Materials and Waste Management | Foundation for courses in curriculum. Topics include definitions of toxic and hazardous substances and wastes, RCRA classification, and OSHA criteria. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 502 | Regulatory Framework for Toxic and Hazardous Substances | Examines federal, state, and local regulations for hazardous materials and wastes. Includes history and trends in regulatory development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 503 | Principles of Toxicology | Interaction of chemicals with life and environment. Mechanisms of toxic action, dose-response relationships, toxicity testing models, predictive toxicology, and epidemiology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 506 | Chemistry of Hazardous Materials | Chemistry and toxicology of hazardous chemicals. Topics include proper handling, storage, transportation, and disposal. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 507 | Industrial Hygiene | Emphasizes chemical hazards in industrial settings. Topics include recognizing and measuring hazards, control techniques, and regulatory standards. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 520 | Sustainability and Sustainable Development | Explores broad field of environmental sustainability with U.S. and international coverage of green living practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 522 | Air Pollution and Toxic Chemicals | Examines issues in the measurement analysis and control of toxic chemicals in air pollution. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 523 | Soils and Groundwater Contamination | Theoretical and practical hydrogeology as it applies to cleaning up contamination. Investigative techniques, monitoring, risk assumptions, and assessment methodology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 527 | Environmental/Resources Regulations Concepts | Environmental regulations related to water, land use, endangered species, NEPA and other policy issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 528 | International Environmental Management | Studies environmental issues and laws outside the U.S., impact of free trade, and multinational corporations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 540 | International Environmental Law and Policy | Studies international environmental agreements, enforcement mechanisms, and the role of NGOs and international organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ERM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ERM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 501 | Social Theory and the Environment | Investigates key conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 502 | Political Ecology: Theory and Research | Investigates key theories and research of political ecology through the conceptual domains of environmental social science from interdisciplinary and comparative perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 510 | Urban Environments | Investigates major issues and themes on the urban environment, from urban sprawl to environmental justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 513 | Institutions | Studies formal and informal institutional arrangements for the governance of natural resources using case studies, experiments, and formal models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only AML, ESS or SOS 540 |
| ESS | 577 | Interdisciplinary Writing Seminar | if you want your work to make a difference in the world, you need to be able to communicate your ideas to diverse audiences in a way that is interesting and accessible. Teaches students to write clearly, persuasively and ethically to people in their disciplines, in other disciplines, and outside academia. Approaches writing as a way to think critically and refine ideas, as well as to communicate them to others. | N | SEM | Y | GNA | Liberal Arts and Sciences | School of Human Evolution & Social Change | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is only allowed for ESS 577 or SOS 577 or SOS 598 (Interdisciplinary Writing) or SOS 598 (Writing Seminar) |
| ESS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ESS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| ESS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ESS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EST | 115 | Digital Systems I | Introduces digital electronics. Topics include number systems and codes used in digital systems, Boolean algebra, logic gates, logic families, and combinational and memory circuits. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | |
| EST | 160 | Introduction to Electronic Systems | Introduces the components, devices, and practical design principles that are used to create competitive electronic systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Credit is allowed for only EST 160 or 194 (Intro to Electronic Systems) |
| EST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 200 | Project Lab | Provides theoretical and practical overview of principles of measuring instruments and the main objective is to build good lab disciplines. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | Pre-requisites: Sophomore standing |
| EST | 210 | Circuit Analysis I | Parallel/Series circuits, ohm's law, network theorems, capacitors/inductors and transient analysis. Overview of electronic devices, BJTs, FETs, op-amps. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MAT 266 (or 271); PHY 112 (or 131) |
| EST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 310 | Circuit Analysis II | Electronic device analysis and introduction to design. Power supplies, diode circuits, FETs, BJTs, op-amps. Emphasizes frequency response. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210 |
| EST | 315 | Digital Systems II | Digital electronics systems, HDL circuits and systems design techniques, and device applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 115 and 210; Credit is allowed for only EST 315 or 394 (Digital Electronics II) |
| EST | 345 | Planning and Delivering Engineering Projects | Project-based, hands-on course teaches team building, planning, soft skills, tracking progress, and powerful methods that deliver successful, on-time projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200 |
| EST | 350 | Microcontroller Applications | Interfacing of microcontrollers to sensors, switches, indicators, and other human interfaces using the C programming language. Applications involve the integration of both hardware and software. Also addresses applications dealing with open- and closed-loop applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 315; Credit is allowed for only EST 350 or 394 (Adv Micro Controllers) |
| EST | 370 | Sensors | Overview of sensor technology, including mechanical, magnetic, radiation, thermal, chemical, and biological applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 200; EST 210; UET 331 |
| EST | 372 | Wireless Communication Systems | Components and signal processing for modern wireless communication systems, including major applications, problems, and new technologies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EST 310 or Information Technology major with IFT 100 |
| EST | 380 | Electronic Devices | Covers materials, structures, and technology for the design, production, and application of the major categories of electronic devices. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: UET 331; Credit is allowed for only EST 380 or 394 (Intro to Electronic Devices) |
| EST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| EST | 410 | Electronic System Design | Analysis and design of Op-amps, power amplifiers, and digital logic families, Feedback design using frequency response. Computer analysis and design. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 310; Credit is allowed for only EST 410 or 494 (Electronics Systems Design) |
| EST | 465 | Statistical Process Control | Introduces statistics, seven QC tools, and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, and quality system. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; Senior standing; Credit is allowed for only EST 465, 494 (Statistical Process Control) or 565 |
| EST | 470 | Capstone Design I | Small-group projects designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 345; EST 370; EST 372 |
| EST | 471 | Capstone Design II | Continuation of a small-group project encompassing designing, building, evaluating, and analyzing components, assemblies, and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 470 |
| EST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| EST | 490 | Electronics Project | Individual or small group projects in applied electronics; emphasizes lab practice or hardware solutions to practical problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| EST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |

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| EST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisite(s): Fulton Schools of Engineering undergraduate student; min GPA 2.25; OR Fulton Schools of Engineering graduate student |
| EST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| EST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Fulton Polytechnic School graduate student; minimum 15 hours graduate level courses |
| EST | 565 | Statistical Process Control | Seven QC tools and control charts for data analysis and interpretation; process capability, 6-sigma, lean manufacturing, quality system, case study and lab experiment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate (degree seeking or nondegree seeking) student; Credit is allowed for only EST 465, 565 or 598 (Statistical Process Control) |
| EST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Pre-requisites: MS in Technology graduate student |
| EST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| EST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student OR Fulton Schools of Engineering senior student with minimum 3.00 ASU GPA |
| ETH | 100 | Ethnic and Indigenous Lives | Undertakes an introductory comparative analysis of ethnic groups to understand cultural diversity within the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | |
| ETH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 300 | Principles of Ethnic Studies | Familiarizes students with a range of analytical and theoretical frameworks in the field of ethnic studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | C | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ETH | 310 | Critical Research Methods | Examines methodological approaches common to programs in such disciplines as American Studies, Ethnic Studies, and Women's Studies. Critical qualitative, historical, archival, and feminist methodological approaches to the study of diverse United States populations comprise the focus of this course. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisite: Minimum 40 hours |
| ETH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| ETH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| ETH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| ETH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| EVO | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 494 (Emerging Infectious Diseases), EVO 520 or MIC 520 |
| EVO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 601 | Principles of Evolution | Introductory course for graduate students; covers the principles of evolutionary biology from theoretical, empirical, and historical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EVO | 610 | Research Areas of Evolution | Broadly conceived description of the current research areas of evolutionary biology. Expected of all first-year evolution students. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EVO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |

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| EXW | 101 | Foundations in Exercise Science and Wellness | Student-centered instructional course designed to excite and propel the student into the development of a successful academic and professional career path in the field of exercise science and wellness. Presents a general overview of the career opportunities for students in the field with group and individual assignments that enable students to more thoroughly explore options related to their goals. Divided into 3 major sections: academic preparation, professional development and career exploration. Helps students develop their own individual blueprint for accomplishing their professional goals and understand the skills they need to develop along the way to be successful. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 102 | Principles and Foundations of Health Education and Health Promotion | Designed for students who anticipate working as a health educator in clinical, governmental, worksite/corporate, research-based, or other professional settings. Students gain an understanding of the selected historical, cultural, philosophical, professional and ethical issues in the practice of health education. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 105 | Physical Activity Instruction: Beginning | Beginning instruction in a variety of physical activities such as aerobics, aquatics, racquet sports, physical conditioning, and golf. Y grade only. May be repeated for credit. 2 hours per week. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 194 | Special Topics | | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 212 | Instructional Competency Laboratory | Methods of instructing and leading fitness activities including aerobic, resistance, and flexibility activities. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major |
| EXW | 214 | Flexibility Instructional Competency Laboratory | Science and methods of instruction related to flexibility exercises and activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Prerequisite(s): Exercise and Wellness or Physical Education major. |
| EXW | 216 | Muscular Strength Instructional Competency Laboratory | Science and methods of instruction related to resistance training and muscular strength activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Exercise and Wellness or Physical Education major |
| EXW | 218 | Cardiovascular Instructional Competency Laboratory | Science and methods of instruction for cardiovascular exercise and fitness activities. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisite: Exercise and Wellness or Secondary Education (Physical Education) major |
| EXW | 284 | Exercise and Wellness Preinternship | Professional development course designed to help students prepare for their respective senior-year internships and post-graduate career fields, while developing and enhancing professional practice skills. Students engage in individual assessment and group learning with student peers through activities such as required readings and self assessments, career-related exploration assignments and networking. Utilizes on-campus resources, such as Career Services and the Writing Center, for support and assistance with course work and assignments. Focuses on developing long-term professional and interpersonal competencies career preparation, professional self marketing, and workplace professionalism. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| EXW | 290 | Foundations of Health Promotion and Wellness | Introductory analysis of the roles, responsibilities and theories of professional fields of study related to health promotion, physical activity, fitness and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre/Co-requisites: EXW 100 or KIN 100; Minimum 30 earned hours |
| EXW | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 302 | Fundamentals of Wellness | Overview of fundamental health, exercise and wellness concepts. Emphasizes personal wellness assessment and application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | |
| EXW | 310 | Computer Skills and Technology for Exercise and Wellness | Applies computer technology to principles of social marketing, tailored communication, e-health consumerism, and statistical analysis. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: Exercise and Wellness student; MAT 114, 117, 119, 142 or 170 with C or better |
| EXW | 311 | Special Populations in Exercise and Wellness | Introduces the challenged population and surveys the agencies that work with special populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| EXW | 315 | Physiological Foundations of Movement | Studies human movement with emphasis on physiological function of the body in response to physical activity and fitness training. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 316 | Physiological Foundations of Movement Laboratory | Investigates theories and methods of exercise physiology in a laboratory and/or applied setting. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s) with C or better: BIO 201, 202. Corequisite(s): BS Exercise and Wellness major: EXW 315 |
| EXW | 320 | Management and Leadership in Exercise and Wellness | Studies management, leadership, legal, ethical, and programmatic theories and applications in fitness and wellness settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 102, 105 or 108; Minimum 30 hours |
| EXW | 322 | Spa Management I | History of the spa industry. Overview of different types of spas, spa programs and services, facilities and equipment, operational procedures and systems, the wellness component of spas, and computer applications in spa operations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | |

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| EXW | 325 | Fitness for Life | Analyzes physical fitness and benefits of exercise with emphasis on application of strategies for fitness and wellness evaluation, behavior change, and lifelong program planning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: ENG 101; Minimum 30 hours |
| EXW | 330 | Kinesiological Foundations of Movement | Study and consideration of human movement with emphasis on kinesiology principles and their application to movement and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: BIO 201 with C or better |
| EXW | 335 | Physical Activity and Fitness Concepts | Topics are designed for the physical activity and health education professional and focus on application of basic exercise physiology and nutritional concepts in the design and implementation of exercise and physical activity programs to increase physical function and improve health risk factors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 and 202 with C or better |
| EXW | 340 | Health Behavior Theory | Focuses on health behavior change theories and concepts that are necessary for planning, implementing and evaluating health education and health promotion programs. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): PSY 101 (or PGS 101); minimum 45 hours |
| EXW | 342 | Health Behavior Change | Examines major theories of health behavioral change. Develops intervention strategies and techniques employed to facilitate health behavioral change. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101); minimum hours 45 |
| EXW | 344 | Physical Activity in Health and Disease | Examines the role of physical activity and fitness in the development of morbidity and mortality throughout the human life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): BIO 202; Pre- or corequisite(s): EXW 101 or 102 (or EXW 290 or 300) |
| EXW | 348 | Methods of Health Education | Intended for the pre-professional health educator to learn how to develop sound, effective, and appropriate presentation methods to create learning experiences that facilitate voluntary changes leading to health-enhancing behaviors. Focuses on the knowledge and skills necessary to understand learning and the diverse learner; structure the learning environment; develop appropriate behavioral learning objectives; select appropriate instructional methods; and develop quality lesson, presentation, and unit plans with sound strategies for evaluating learning. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre- or corequisite(s): COM 225; EXW 101 or 102 (or EXW 290 or 300) |
| EXW | 350 | Substance Abuse and Addictive Behavior | In depth study of the pharmacology and effects of addictive substances and the psychosocial risk factors and consequences of substance abuse. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; BIO 202; PSY 101 (PGS 101) |
| EXW | 380 | Body Image and Wellness | Explores body image in American culture from physical, psychological, historical, and societal perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| EXW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 400 | Stress Management for Wellness | Examines the stress response and management from a behavioral perspective as it pertains to individuals or groups. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202; PSY 101; 45 minimum hours |
| EXW | 410 | Obesity Perspectives and Prescriptions | Provides a structure for understanding, critiquing and synthesizing the information and misinformation about obesity, weight loss and health. Explores topics: the obesity epidemic; health consequences of obesity; fitness and fatness; etiology of weight gain; health implications of weight loss; psychological, cultural, social and political considerations of obesity; and a review of the application of prevention and treatment of obesity. Examines a wellness perspective about obesity by considering obesity as a normal physiological response within a pathological environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BIO 202; PSY 101. Credit is allowed for only EXW 410 or EXW 494 (Obesity Perspectives and Prescriptions)Pre-req for EXW 410 |
| EXW | 412 | Pediatric Obesity | Covers a variety of aspects related to pediatric obesity including the causes and consequences in terms of physiologic, genetic, psychosocial, environmental and economic. Also discusses potential interventions such as behavioral, pharmacologic, surgical and public health and policy. Evidenced-based course where research guides class lectures and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 315 or KIN 340; Credit is allowed for only EXW 412 or KIN 446 or EXW 494 (Pediatric Obesity) or KIN 494 (Pediatric Obesity) |
| EXW | 420 | Exercise Testing | Theoretical basis and practical application of pre-exercise screening, exercise testing, estimates of energy expenditure, and interpretation of results. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 4 | | Pre-requisites: EXW 214, 216, 218 and 315 with C or better |
| EXW | 425 | Exercise Prescription | Theoretical basis for and application of general principles of exercise prescription to various ages, fitness levels, and health states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 214, 216, 218, 315, and 330 with C or better; Pre/Co-requisites: EXW 420 with C or better if completed |

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| EXW | 434 | Fitness and Strength Conditioning | Applied course covering advanced fitness, strength and conditioning concepts and techniques. Applies to professionals working with individuals in whom a major goal of their physical activity program is to maximize human performance potential either for personal fitness goals or success in specific sports or for applications in occupational athletes (military, fire and police). Guides in development of techniques and skills critical to safe, effective and motivating instruction of advanced speed, power, agility and conditioning exercises and programs for varying individuals and teams. Includes both lecture and participatory application labs. Expects students to search and analyze the literature on advanced fitness conditioning concepts and techniques. Addresses a significant number of core competencies identified for the NSCA Certified Strength and Conditioning Specialist (CSCS) examination. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 216; minimum 75 hours; Pre- or corequisite(s): EXW 315 or 330; Credit is allowed for only EXW 434 or EXW 494 (Sports and Fitness Conditioning) |
| EXW | 436 | Community Health | Applies major concepts of community health. Focuses on populations, settings and social issues related to community health. Basics of epidemiology, disease prevention, and health promotion. Explores community health concepts related to organizing and building community coalitions and health programs. Also explores school health, maternal, infant and child health, minority health, and environmental influences on community health. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 101 or 102 (or 290 or 300) with C or better; EXW 342 with C or better |
| EXW | 444 | Epidemiology | Introduces epidemiological concepts and prepares the student to read, comprehend, and report epidemiological research. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 101 or 102 (or EXW 290 or 300); any CS statistics course with C or better |
| EXW | 446 | Health Promotion and Program Evaluation | Applies theory-based concepts and methods of health promotion and program evaluation. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 101 or 102 (or EXW 290 or 300) with C or better; EXW 342 with C or better |
| EXW | 450 | Social Determinants of Health and Health Behavior | Examines the social determinants (e.g., early childhood, family, schools, worksites, built and food environments, and socio-economic status) of health and health behavior, particularly physical activity behavior and eating. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | (L or SB) & C | Prerequisite(s): EXW 101 or 102 (or 290 or 300) with C or better; PSY 101 (or PGS 101) with C or better |
| EXW | 452 | Health Advocacy in Health Education | Links advocacy for individual patients/consumers (patient advocacy) with advocacy for groups of patients/consumers (policy advocacy). Identifies and explores specific skills needed by community health educators, pre-professional primary/secondary health teachers and health education specialists for developing a practice of advocacy in their work. Methods, techniques and resources used in advocating in health promotion. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): minimum 45 hours |
| EXW | 454 | Health Promotion Program Planning and Implementation | Applies theory-based concepts and methods of health promotion (HP). Covers selected topics in HP across a variety of domains of health. Program planning concepts include the use of planning frameworks, needs assessments, and the use of theory in health promotion program planning. Also covers practical issues related to health promotion program implementation such as resource management and program marketing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 101 or 102 (or EXW 290 or 300); EXW 342; Pre- or corequisite(s): EXW 444 with C or better if completed |
| EXW | 456 | Health Promotion Program Evaluation | Covers program evaluation concepts including how to plan an evaluation, how to analyze and interpret data, and how to report evaluation results. Students learn a basic framework for conducting a program evaluation, various research/evaluation designs, and data analysis and statistics. Topics are covered in enough detail so that the student may understand how inferences are made regarding program evaluation. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 444; Pre/Co-requisite: EXW 454 |
| EXW | 460 | Resistance Training Application and Theory | Fosters critical thinking as it applies to resistance training theory. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 216 and 315 with C or better |
| EXW | 466 | Health Promotion Program Management and Administration | Uses a dynamic team process to build knowledge and skills for the effective administration of health promotion program proposals. Areas of emphasis are strategic planning, managing fiscal resources, demonstrating leadership, developing human resources, facilitating community partnerships, formative and summative evaluation. Aligns with specific objectives required for the Certified Health Education Specialist offered by the National Commission for Health Education Credentialing. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 454; Pre/co-requisite: EXW 456 |
| EXW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): 2.00 GPA; Exercise & Wellness concentration: EXW 420 and 425 with C or better OR Health Promotion concentration: EXW 348 and 456 with C or better OR Health Education and Health Promotion major: EXW 348 and 454 and 456 |
| EXW | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |

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| EXW | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| EXW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| EXW | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |
| EXW | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| EXW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 501 | Research Statistics | Statistical procedures; sampling techniques, hypothesis testing, and experimental designs as they relate to research publications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 534 | Sports and Fitness Conditioning | Bases of sports and fitness conditioning, including aerobic and anaerobic power, strength, flexibility, and analysis of conditioning components for sports and fitness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 535 | Advanced Exercise Assessment and Prescription | Theory and practice of laboratory methods in applied exercise physiology. Procedures for assessment and prescription for individuals with chronic disease. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 536 | Physiological Aspects of Physical Activity and Chronic Disease | Role of physiological mechanisms associated with acute and long-term physical activity and its influence on chronic disease and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 538 | Obesity, Exercise and Health | Critically examines scientific and medical evidence concerning obesity, exercise, and health across the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 542 | Health Promotion | Theory and research concerning fitness and wellness programs in nutrition, physical activity, smoking cessation, and stress management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 544 | Fitness/Wellness Management | Development of the fitness/wellness industry. Planning, organizing, promoting, and managing fitness/wellness programs. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 560 | Cardiopulmonary Rehabilitation | Exercise testing and prescription for cardiac and pulmonary patients as well as pharmacology, electrocardiography, pathophysiology of chronic diseases, and leadership of patients in cardiac rehabilitation and pulmonary rehabilitation programs. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 562 | Functional Assessment and Exercise Prescription for Older Adults | Assessment of functional capacity and prescription of exercise that is appropriate for older adults including healthy, frail, diseased and very old. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS Clinical Exercise Physiology or Exercise and Wellness major |
| EXW | 564 | Aging and Lifestyle Behaviors | Provides an overview of health behaviors in older adults. Centers on the perceptions and behaviors of older adults in reference to illness prevention, health promotion and reactions to acute and chronic illness and the context in which these behaviors occur. Specifically examines the psychological, familial, cultural and contextual factors which influence older adults' personal health practices and illness behaviors. Considers the older person as an individual in a complex system, engaged in decision making and his/her subsequent actions to maintain or improve health status. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 542 |
| EXW | 565 | Cardiovascular and Pulmonary Physiology | In-depth study of the physiology of exercise with special regard to cardiovascular and pulmonary responses in healthy and chronically diseased individuals. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): MS in Clinical Exercise Physiology major |
| EXW | 568 | Management and Treatment of Chronic Disease for the Clinical Exercise Physiologist | Investigates the physiology, pathophysiology and treatment options for a variety of diseases that the clinical exercise physiologist routinely encounters in the work environment. Prepares students to qualify for ACSM Clinical Exercise Physiologist certification. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 560 |
| EXW | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EXW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 597 | Capstone Project | For non-thesis students in the MS degree program to provide a culminating field experience or non-research project for students to apply the coursework and healthy aging concepts. | N | RSC | N | YGB | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: EXW 500, 501, 536, 542 and 591 |
| EXW | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 635 | Physical Activity and Aging | Examines and discusses the theoretical and applied health-related research on physical activity and aging. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 640 | Analysis of Variance for Exercise and Wellness | Analyzes variance methods with an emphasis on research measures of human performance. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 641 | Qualitative Research Methods | Introductory overview of qualitative research methods frequently used in education and health. Emphasizes analysis of research and practical application. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 642 | Exercise Epidemiology | Physical activity, exercise, and physical fitness and the development of chronic disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: EXW 500 with C or better; EXW 501 with C or better |
| EXW | 643 | Correlation/Regression/Multivariate Statistics | Graduate-level statistics course for PhD/master's students who will be doing research in the area of exercise and wellness. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 645 | Advanced Applied Methods and Data Analysis | Heavily applied focus on implementing research methods and statistical modeling techniques in the health promotion sciences. Addresses practical issues in specifying, interpreting and presenting research findings using appropriate statistical techniques. Addresses reporting standards (e.g., CONSORT, STROBE, PRISMA) and practical issues related to manuscript submission. Covers analytical methods including multiple regression and logistic regression, ANOVA, mediation and moderation, exploratory factor analysis, multilevel models for hierarchical data and intensive longitudinal data, basic time-to-event analyses (i.e., survival), and meta-analysis; also remains flexible to address critical and emerging methodologies in the health promotion sciences. Covers statistical methods in a conceptual nature with a focus on the use of statistical software packages (primarily SPSS) and interpretation of outputs. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 640, 643 |
| EXW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 701 | Advanced Research Methods | Provides doctoral students in Nutrition and Health Promotion with instruction in methods to enhance scientific writing skills in the health sciences and guidance through the process required to organize and submit a fundable research grant proposal. | N | SEM | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 700 |
| EXW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| EXW | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| EXW | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 101 | Personal Growth in Human Relationships | Personal development and behavior as related to competency in interpersonal relationships with the family. Processes of family interaction. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshman Standing; Maximum 25 hours |
| FAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| FAS | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| FAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 301 | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 301 | Introduction to Parenting | Integrated approach to understanding parenting and parent-child interactions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| FAS | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS or SOC 324 |
| FAS | 331 | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 331 | Marriage and Family Relationships | Issues, challenges, and opportunities relating to present-day marriage and family living. Factors influencing interrelations within the family. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 332 | Human Sexuality | Relationship of sexuality to family life and to major societal issues. Emphasizes developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| FAS | 360 | Black Families in the Diaspora | Within a historical, cultural, social-economic, and international context, the institution of Black families begins with their lives in Africa, South America, and the Caribbean and follows the cultural continuities and adaptations impacting the structure and functioning of contemporary African America families. Theoretical models provide focus to studying voluntary and involuntary migration, family labor force involvement, gender roles, marital relations, parenting, kinship and community networks. Throughout the course attention is given to the role of social policies in shaping the well-being of Black families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): AFR 200 (or AFS 200) or FAS 101; Credit is allowed for only AFR 360 (or AFS 360) or FAS 360 |
| FAS | 361 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Prerequisite(s): SOC 101 or SOC 301 or CDE 232; SOC 390; Credit is allowed for only FAS 361 or SOC 391 |
| FAS | 370 | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | 370 | Family Ethnic and Cultural Diversity | Integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Credit is allowed for only AFR 370 (or AFS 370) or FAS 370 |
| FAS | 390 | Supervised Research Experience | Practical, firsthand experience within current faculty research projects in family studies or child development. Y grade only; may be repeated for total of 6 hours. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |

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| FAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| FAS | 403 | Aging, Lifespan Development, and the Family | Analyzes aging issues and their effects on family members of older adults. Integrates social policy, health, and relational factors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 421 | Caregiving for Older Adults | In-depth analysis of the theory and practice of caregiving for the senior population. Integrates multiple perspectives (family caregivers, professionals, paraprofessionals, government, and industry policies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). Credit is allowed for only ALD 431, 531 or FAS 421 |
| FAS | 431 | Parent-Adolescent Relationships | Dynamics of the relationships between parents and adolescents. Developmental characteristics of adolescence and the corresponding adult stage. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| FAS | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 331 with C or better; Credit is allowed for only SOC or FAS 435 |
| FAS | 436 | Sexuality in Mid-Life and Beyond | Analyzes physical changes, myths and stereotypes, gender issues, and relationship issues pertaining to sexuality in the middle and older adult years. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 440 | Fundamentals of Marriage and Family Therapy | Introduces the fundamental orientations of marriage and family therapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| FAS | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| FAS | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| FAS | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| FAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| FAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| FAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| FAS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| FAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |
| FAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| FAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| FAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEL | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 503 | Academic Professional Development | Becoming and working as a academic, including how to write a vita, choose a thesis topic, or find dissertation data. | N | REC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 505 |

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| FAS | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 507 |
| FAS | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling. Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. Projects involve conducting analyses and writing results. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 508 |
| FAS | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 509 |
| FAS | 512 | Secondary Data Analysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FAS or SOC 512 |
| FAS | 531 | Theoretical Issues in Family Sciences | Historical and current approaches to theory development, evaluation, and application in family studies. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 539 | Research Issues in Family Interaction | Critical review of current and past research in the area of family dynamics. Emphasizes interactional processes within the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 570 | Introduction to Marriage and Family Therapy | Introduces major marriage and family therapy orientations. Reviews history, theory, application, and outcome research for each orientation. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 571 | Assessment in Marriage and Family Therapy | Assessment and outcome evaluation of couples and families involved in marital and family therapy. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 572 | Advanced Techniques in Marriage and Family Therapy | In-depth review of assumptions and advanced techniques associated with contemporary marriage and family therapy approaches. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 573 | Dysfunctional Families | Critical review of current theory and empirical evidence connecting marital and family interaction patterns with aberrant behavior. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 574 | Family Theory for Marriage and Family Therapy | Examines the theoretical orientations within the family therapy field, including the evolution, premises, and assumptions of each. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 575 | Applied Issues in Couples - Therapy | Examines issues unique to therapeutic work with couples, including lifespan transition, multicultural issues, divorce, parenting, and remarriage. Seminar. Enrollment requirements: Pre-requisites: Admission into MAS-MFT program. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 576 | Applied Issues in Human Development for MFT: Psychopathology | Recognition and diagnosis of maladaptive behavior according to DSM criteria across human development. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 577 | Applied Issues in Children and Adolescents in Marriage and Family Therapy | Examines developmental factors that lead to disorders in children and adolescents, with an emphasis on a systemic framework. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 578 | Applied Issues in Sexuality for Marriage and Family Therapy | Examines the major methods used to assess and treat sexual issues and the treatment of sexual disorders. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 579 | Applied Research in Marriage and Family Therapy | Critical examination of research concepts, quantitative and qualitative research designs, and applicability in clinical settings. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 581 | Professional Issues and Ethics | Examines legal and ethical concerns of marriage and family therapists, emphasizing licensing standards and the Code of Ethics. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: MAS-MFT student |
| FAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): 3 hours in any CDE, FAS or SOC 500-level course with C or better; Credit is allowed for only FAS 586 or SOC 586 |
| FAS | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |
| FAS | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): CDE 501 or SOC 501; CDE 531 or SOC 585; FAS 500 or SOC 500; FAS 587 or SOC 587; 12 additional graduate-level hours in CDE, FAS, and/or SOC; Credit is allowed for only FAS 588 or SOC 588 |
| FAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FAS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 123 | ASU Financial Literacy | A practical approach to financial challenges faced by ASU students. Emphasizes financial choices likely to be encountered while at ASU, as well as issues to be encountered immediately upon graduation. Topics include credit cards, student loans, credit scores, saving, investing, insurance, transportation, housing, taxes, goal setting and budgeting. | N | LEC | N | YGB | W.P. Carey School of Business | Department of Finance | 1 | | Credit is allowed for only FIN 123 or 191(ASU Financial Literacy) |
| FIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-3 | | |
| FIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| FIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FIN | 300 | Fundamentals of Finance | Theory and problems in financial management of business enterprises. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: ACC 231, 232 or 261; ECN 212; ECN 221, ECN 231, IEE 380 or STP 280; MAT 211, 266 or 271; Non-Business min. 2.5 GPA and min. 56 hours; Pre- or corequisite: ACC 241, 242 or 271; Credit for only FIN 300, 302 or 303 |
| FIN | 302 | Managerial Finance | Theories and techniques used for business decisions in working capital management, capital budgeting, financial control, and long-term financing. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: ACC 231, 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite: ACC 241, 242 or 271 with C or better if completed. Credit allowed for only FIN 302 or 303 |
| FIN | 303 | Honors Finance | Covers basic principles of finance, practical tools for financial decision making, and evaluation methods employed by the firm. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey honors student, with C or better: ACC 231, 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite: ACC 241, 242 or 271 with C or better if completed. Credit allowed for only FIN 302 or 303 |
| FIN | 331 | Financial Markets and Institutions | Analyzes financial markets and intermediaries. Theory of financial intermediation, interest rate theory, money and capital market instruments, and government regulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BS major or Business minor; with C or better: ACC 231 or 232 or 261; ECN 211 or 213; ECN 212 or 214; ECN 221 or 231; MAT 211 or 271; Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed |
| FIN | 361 | Advanced Managerial Finance | Builds on FIN 302. Advanced material on capital budgeting, cost of capital, CAPM, asset valuation, capital structure, and financial policy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 302 with C or better |
| FIN | 380 | Personal Financial Management | Dynamic analysis of personal financial planning, including time value of money, stock and bond investment, and retirement and estate planning. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree student with minimum 2.00 GPA OR Graduate student; Not for Finance major credit |
| FIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS non-Finance major; FIN 300 (or 302 or 303) with C or better |
| FIN | 421 | Security Analysis and Portfolio Management | Security analysis theory and practice. Selection and management of financial asset portfolios. Securities markets and portfolio risk-return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey Finance BS major; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better |
| FIN | 427 | Derivative Financial Securities | Study of stock options, index options, convertible securities, financial futures, warrants, subscription rights, and arbitrage pricing theory. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey Finance BS student; FIN 421 with C or better |
| FIN | 431 | Management of Financial Institutions | Asset/liability and capital management in financial institutions. Influence of market factors and regulatory agencies. Emphasizes commercial banks. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey Finance BS major; ACC 340; FIN 303 or 361 with C or better; FIN 331 with C or better |
| FIN | 456 | International Financial Management | Exchange rate determination, financial markets, managing multinational corporations, capital budgeting, and hedging currency risk exposure from an international perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | G | Prerequisite(s): W.P. Carey Finance BS major; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better, OR Honors student in Finance: FIN 303 and 331 with C or better |
| FIN | 461 | Financial Cases and Modeling | Case-oriented capstone course in managerial finance. Contemporary issues of liquidity management, capital budgeting, capital structure, and financial strategy. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | L | Prerequisite(s) with C or better: ACC 340; FIN 303 (or FIN 361), 331; minimum 87 hours; BS Finance major. Pre- or corequisite(s): FIN 421 with C or better if completed |
| FIN | 471 | Investment Portfolio Management | Under faculty supervision, students manage over \$500,000 of the ASU Foundation's assets over the course of the year. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Pre-requisite: FIN 303 or 361 with C or better |
| FIN | 472 | Investment Banking Industry Scholars | Provides conceptual basis for performing analysis, providing advice and making decisions in elite financial services firms. Must take for a total of 3 hours. | N | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-3 | | Prerequisite(s): application and selection process. Credit is allowed for only FIN 472 or FIN 494 (Investment Banking Industry Scholars) |
| FIN | 481 | Honors Seminar in Finance | Honors course covering topics that include theory and applications concerning managerial finance, investments, and financial institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey Finance BS major with Honors status; ACC 340 with C or better; FIN 303 or 361 with C or better; FIN 331 with C or better |
| FIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisites: W.P. Carey BS student; FIN 300, FIN 302 or 303 with C or better |
| FIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Finance | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey Finance BS student; ACC 315 or ACC 303 or ACC 340, FIN 331, and FIN 303 or FIN 361 all with C or better |
| FIN | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-6 | | Prerequisite(s): Barrett Honors student |
| FIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-7 | | Pre-requisites: W.P. Carey Finance students with professional status; FIN 331 and 361 with C or better; ACC 315 or 340 with C or better |
| FIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-3 | | Pre-requisites: W.P. Carey Finance students with professional status |

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| FIN | 502 | Managerial Finance | Develops analytical techniques and financial theories used to make optimal decisions in a corporate setting. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2-4 | | Pre-requisites: ACC 502 with C or better; ECN 501 with C or better |
| FIN | 520 | Valuation Techniques | Improves the understanding of valuation concepts and how to apply them. Shows how to value assets using free cash flow and economic value-added methods. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 525 | Investment Strategies | Presents the fundamental principles of risk and return, portfolio diversification, asset allocation, efficient markets, active portfolio management, portfolio evaluation. Reviews selected alternative investment strategies such as hedge fund investments. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 530 | Derivatives | Intermediate- to advanced-level course in derivative assets such as options, forward and futures contracts, swaps and financial engineering. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 540 | Advanced Financial Management | Offers a comprehensive exploration of the revolutionary developments occurring in the world's financial markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 545 | Advanced Corporate Finance | Studies major decision-making areas and selected topics in corporate finance. Attempts to develop decision-making ability in these areas using both lectures and cases. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 545 or 591 (Advanced Corporate Finance) |
| FIN | 550 | Fixed Income | Intermediate- to advanced-level course in fixed income instruments and associated relative valuation of the securities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 555 | Entrepreneurial Finance | Provides an overview of the economics and institutions involved in entrepreneurial finance. Focuses on the financing of new ventures. Consists primarily of case analysis, supplemented with in-class exercises and lecture material. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 560 | International Finance | Examines the financial issues of an international investment decision. Main topics include foreign exchange market, investment alternatives in the international capital markets, and the management of foreign exchange risk. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Prerequisite(s): FIN 502 with C or better; degree-seeking graduate |
| FIN | 565 | Risk Management in Banks and Financial Institutions | Provides a risk management view of financial institutions (also known as financial intermediaries). Traditionally, banking courses have focused on an overview of the financial services industry, sector by sector, concentrating on balance sheet presentations and overlooking management decision making and risk management. In contrast, this course emphasizes a risk management approach. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 575 | Finance Capstone | Provides a culminating experience as a step in completing the degree. Applies finance principles related to the investment, risk management and financing policies of the firm to develop decision-making ability in these areas. Emphasizes analysis of finance problems through selected readings and case studies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W. P. Carey degree-seeking graduate student; Credit is allowed for only FIN 575 or 591 (Finance Capstone) |
| FIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: FIN 502 with C or better |
| FIN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FIN | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 781 | Theory of Finance | Fundamental tools of financial economics; asset pricing, arbitrage, option pricing, capital structure, dividend policy, asymmetric information, and transaction-cost economics. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 782 | Theory of Finance II | Fundamentals of corporate finance, contract theory, agency problems, and game theory applications in Finance. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 783 | Empirical Asset Pricing | Asset pricing models in finance; efficient market hypothesis, empirical factor models, option pricing basics. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 785 | Financial Economics of Capital Markets | Asset pricing theory, equilibrium asset pricing models, and the equity premium puzzle; incomplete and imperfect markets. | N | SEM | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking Graduate student |
| FIN | 786 | Corporate Finance | Issues in corporate finance covering topics that impinge on corporate finance, financial contracting, intermediation; empirical corporate finance; microstructure. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: W. P. Carey degree-seeking graduate student |
| FIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisite: W.P. Carey degree-seeking Graduate student |
| FIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 201 | Film: The Creative Process I | History, elements, and techniques of theatrical film: cinematography, directing, acting, scriptwriting, producing, and criticism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | |
| FMP | 220 | Film and Media Post-Production I | Required 45-hour lab designed to teach students how to use the Avid Media Composer editing program and supporting software with an emphasis on editing techniques and workflow. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 100-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified User. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisite: Film and Media Production student |
| FMP | 222 | Education in Film | Critically examines how teachers, students, administrators and educational issues are dramatized and represented in popular media. Explores professional teacher preparation, socio-cultural contexts of education systems and learning, and the use of cinema as social critique. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 102) with C or better. Credit is allowed for only FMP 222 or FMP 294 (Education in Film) |
| FMP | 250 | Sex and Violence in Film and TV: Ethics Survey | Sex and violence portrayals in media; examines societal evolution, technological development, market imperatives, production codes, and industry realities and practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 255 | Media Authorship | Surveys the manipulation, editing, compression, encoding and search engine optimization of digital sound and video media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | CS | Credit is allowed for only FMP 255 or 294 (Media Authorship) |
| FMP | 261 | Introduction to Screenwriting | Basic skills of screenwriting including exercises in conflict and resolution, plot points, and theories of three-act structure and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better |
| FMP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 300 | Focus on Film | Specialized study of prominent film artists, techniques, and genres. Emphasizes the creative process. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: ENG102, 105 or 108 with C or better |

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| FMP | 318 | Directing for Film | In-depth analysis of directing theory, textual analysis, visualization, shot composition and spatial connection, staging, rehearsal techniques, and camera movement. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film and Media Production student; FMP 320 with C or better |
| FMP | 320 | Film and Media Post-Production II | In-depth analysis of editing theory, storytelling, nonlinear editing techniques and equipment, basics of visual and audio effects and color grading using the Avid Media Composer editing program and supporting software with an emphasis on storytelling and aesthetics. Part of the Avid Learning Partner program, taught by a Certified Avid Instructor. Satisfies the Media Composer 200-level certification as part of Avid's official curriculum. Upon completion of this course, students take an exam to become an Avid Certified Professional. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s) with C or better: FMP 220; FMP 300 (Film Production Part 1 or Film Production: Film & Media Part 1 or THE 400); BA Film (Film & Media Production) major |
| FMP | 330 | Professional and Technical Writing for Film/TV Industry | Professional (noncreative) writing skills that prepare students for a career in the entertainment industry. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 220 with C or better; Minimum 56 hours; Credit is allowed for only FMP 330 or 494 (Prof & Tech Writing for Film, Media & TV Industry) |
| FMP | 345 | Cinematography I | Cinematographer's role, photographic and visual theory, framing, shot composition, cameras and equipment, crew management, basic lighting for film and video. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: FMP 220 and FMP 300 OR FMP 394 (Non-Linear Editing for Film and Media) |
| FMP | 365 | Developing a Series | Acquaints students with the development process for episodic series (network, cable, Web, on-demand). Also explores the many facets of the television industry (creative, financial, cultural, historical) and surveys the advances in television content along with an analysis of the cultural impact of television on society. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): FMP 261 with B or better; Digital Culture (Film) or Film major or Film & Media Production minor or Film & Media Production concentration; junior or senior standing. Credit is allowed for only FMP 365 or 394 (Developing a TV Series) |
| FMP | 380 | Film Production Crew | Provides a practical, on-set experience for all Film (Filmmaking Practices) majors. | N | PRA | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: BA Film (Filmmaking Practices) major; 2.50 ASU cumulative GPA; FMP 300 with C or better; Credit is allowed for only FMP 380 or 494 (Film Production Crew) |
| FMP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| FMP | 398 | Capstone Development | Provides the opportunity for all Film and Media Production majors to conceive, develop and complete the intellectual property that will form the basis of their required final capstone projects for FMP in the School of Theatre and Film at Arizona State University. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Pre-requisites: |
| FMP | 417 | Business Ethics in Entertainment | Business and ethical practices of the entertainment industry; analysis of ethical decision-making techniques. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| FMP | 465 | Series Writers Workshop | Offers selected students the opportunity to develop and refine material for a proposed episodic series through collaborative workshops and writing sessions that are equivalent to the development processes utilized in various industry paradigms (network, cable, Internet/on-demand). | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: FMP 365 or 394 (Developing a TV Series) with C or better; Digital Culture (Film) or Film major or Film & Media Prod. minor or BIS (Film & Media Prod.); minimum junior standing. Credit for only FMP 465 or 494 (Television Writing Workshop) |
| FMP | 475 | Producing Series | Function and responsibilities of episodic series producers and production executives for television-based platforms (network, cable, internet/on-demand). Explores a close examination of the business of television, specifically budget, license fees, distribution, and union obligations. Other topics include the structure of studios and networks, producing and marketing series for traditional and new media platforms, and general entertainment business practices. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Film (Film & Media Production) or Film (Filmmaking Practices) major; minimum junior standing. Credit is allowed for only FMP 475 or FMP 494 (Producing Television) |
| FMP | 480 | Film Production Capstone I | Preparation for final project: screenplay, budget, shooting schedule, production lists and reports for preproduction of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 318 with C or better; THE 220 with C or better |
| FMP | 481 | Film Production Capstone II | Final project shooting and postproduction: shooting, editing picture, sound, effects and music; audience screening of required capstone film. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Film & Media Production student; FMP 480 with C or better |
| FMP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| FMP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisites: Film and Media Production student or Filmmaking Practices student or Film and Media Production minor |
| FMP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |

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| FMP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Pre-requisites: Film & Media Production or Filmmaking Practices student |
| FMP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Pre-requisite: Fine Arts Graduate student |
| FMS | 100 | Introduction to Film | Introduces the narrative structure, visual style, and cultural elements of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | |
| FMS | 110 | Introduction to New Media | Explores the cultural effects of new media technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | |
| FMS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 200 | Film History | Introduces the technological, aesthetic, social, and economic aspects of international film history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & H | |
| FMS | 202 | Religion and Popular Culture | Explores various intersectors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | |
| FMS | 209 | Screenwriting Fundamentals | Studies the creativity and the technique of screenwriting for the conventional narrative film and for TV; student writing exercises culminate in a script for micro cinema. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Credit is allowed for only FMS 270or TCL 270 |
| FMS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 300 | Television and Cultural Studies | Applies cultural studies theory and method to the study of American television history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better |
| FMS | 302 | U.S. Media Now | Examines the business of contemporary U.S. film, television, and new media and its relationship to artistic vision and production through research and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 309 | Intermediate Screenwriting | Utilizing the elements of storytelling, students develop and write a treatment and the first act of a screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies conc; ENG 102(or 105 or 108) with C or better; FMS 100 with C or better; FMP 261 (or FMS 209 or THP 261) with C or better |
| FMS | 312 | Film, Media, and Politics Today | Examines how entertainment technologies inform political innovation and campaigning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | |
| FMS | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 340 | Contemporary American Film and Popular Culture | Analyzes American films, television programs, and music as popular cultural documents. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 345 | Asian Pacific Americans and Film | In-depth examination of the representations of Asian Pacific Americans in narrative, popular, experimental, and documentary film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C & H | Pre-requisite: APA 200, APA 210, or FMS 100, or minimum 30 hours. Credit is allowed for only APA 345 or FMS 345 |
| FMS | 351 | Emerging Digital Media | Analyzes modern cultural and digital technologies. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| FMS | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | |
| FMS | 354 | Critical Studies in Animation | Provides critical and practical tools for analyzing mainstream, experimental, and hybrid animation aesthetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: FMS 100 |
| FMS | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Credit is allowed for only FMS 370 or TCL 370 |
| FMS | 374 | American Visions: Innovators in Popular Media | In-depth examination of the career of an innovator in media, whether a producer, director, or scriptwriter, through his/her status as a unique storyteller of the American experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better; Minimum 45 hours |

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| FMS | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or REL 376 |
| FMS | 377 | Baseball, Film, and American Dreams | Critical viewing and analysis of both narrative and documentary baseball film. Genre typically explores American values and national culture, and changes in our concepts of gender roles, race, aging, social class. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: FMS 100, ENG 101 and 102 |
| FMS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 409 | Advanced Screenwriting | Utilizing the elements of storytelling, students outline, develop, and write a feature-length screenplay. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better; FMS 309 with C or better |
| FMS | 411 | Screenwriting Adaptation Studies | Explores the many issues related to narrative adaptation across movies and other media such as television, various Internet phenomena and gaming. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s) with C or better: ENG 102, 105 or 108; FMS 200; Film and Media Studies major, minor or BIS Film and Media Studies concentration; Credit is allowed for only FMS 411 or 494 (Screenwriting Adaptation Studies) |
| FMS | 426 | Films of India | Examines classic, Bollywood and diasporic films of India from 1950 to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ARS 444, ARS 544, FMS 426, ARS 494 (South Asian Cinema) or ARS 494 (Films of India) |
| FMS | 427 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critique stereotypes. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Minimum 55 hours; One 200-level course in literature, art history, history, or film and media studies with a grade of B- or better; Credit is allowed for only ARS 440, FMS 427, ENG 465, ARS, ENG or FMS 494 (Identity and World Film) |
| FMS | 430 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (e.g., genius, deviant); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): a least one course at the 200 level or above in ARS, ENG, FMS, HST with B or better; Credit is allowed for only ARS 443, 494 (Artists Biopics) or FMS 430 |
| FMS | 440 | Los Angeles: Movies and Culture | Explores film treatment of the historical culture of Los Angeles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 441 | Global Cinema | Examines how film represents three important dimensions of globalization: its relationship to national culture, terrorism, and immigration. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 442 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200; ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| FMS | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JUST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| FMS | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| FMS | 450 | Technology, Culture, and Media | Studies the socio-political relationships among technology, culture, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 460 | Masculinity and Film | Examines the representation of masculinity and the male body in film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 461 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |
| FMS | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | (L or HU) & C | Credit is allowed for only FMS 464, ENG 458 or TCL 464 |
| FMS | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 465 |
| FMS | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | C | Credit is allowed for only FMS or TCL 466 |
| FMS | 468 | Crime and Violence in American Film | Addresses three primary aspects of crime and violence in film: representation, societal attitudes, effects on audience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |

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| FMS | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU & C | |
| FMS | 482 | Entertainment Industries | Uses historical methodologies to critique emerging trends in the business of new media storytelling. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: BA Film and Media Studies major or minor or BIS Film and Media Studies concentration; ENG 102 (or ENG 105 or 108) with C or better; FMS 100 with C or better |
| FMS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | |
| FMS | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| FMS | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 490 | Capstone Seminar | Capstone seminar. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | HU | Pre-requisites: BA Film and Media Studies major; minimum 56 hours; ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| FMS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | | Prerequisite(s): Barrett Honors student |
| FMS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of English | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FMS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| FMS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-7 | | |
| FMS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-3 | | |
| FMS | 502 | Hollywood Film Historiography (Online) | This course is offered online only. Explores historiographic and critical scholarship on Hollywood as an industrial, cultural, and aesthetic enterprise. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 503 | Media Industries | Examines the business of contemporary U.S. media practices including film, television, Web-based media, music, video games, mobile phones, and other interactive media. Explores the changing economic structures of these media industries and their relationship to artistic vision and production. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Master of Liberal Studies student or MAS in American Media and Popular Culture student. Credit is allowed for only MLS or FMS 504 |
| FMS | 507 | Crime and Violence in American Film (Online) | This course is available online only. Focuses on historiographic and critical scholarship on three aspects of crime and violence in American film: (1) regulation and censorship; (2) representation and society; and (3) theories about the effects on audiences of viewing crime and violence in films. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 508 | Race and Gender in American Film | Investigates the diverse ways in which race and gender are represented in American film history and culture. In a broader context, also analyzes how the meaning of race and gender, and their intersectionality, has shifted and changed across time and space, and how cinema has contributed to these shifts. Gives attention to the relationships among visual style, narrative structure, generic convention and identity. Students become more literate about the power of film to reflect and refract ideologies of race and gender, and to analyze how these identities impact the experiences of individuals and groups in our society. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only FMS 508 or FMS 598 (Race and Gender in American Film) |
| FMS | 511 | Fundamentals of Cinema & Television Narrative Online | Studies the creativity and the technique of screenwriting for the conventional narrative film and for television. Student writing exercises culminate in a script for micro-cinema. Seminar. Pre-requisite: online student in MAS American Media and Popular Culture | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 512 | Intermediate Cinema and Television Narrative (online) | Focuses on the feature-length screenplay; students complete the first act and treatment of an original feature. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 520 | Cultural History of US Television: Theory & Method | Engages both the theory and methods of cultural studies as implemented in television studies and U.S. television history (from the 1940s to the present). | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |

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| FMS | 522 | Los Angeles: Movies and Culture | Focuses on historiographic and critical scholarship of industry, genre and representation in post-war, self-reflexive Hollywood cinema. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 523 | Film Authorship | Explores the notion of authorship in film, television, and digital media by engaging with a number of critical methodologies such as auteurism, structuralism, post-structuralism, feminism. | N | SEM | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): American Media and Popular Culture MAS students |
| FMS | 527 | Identity and World Film | Examines how films around the world represent gender, race, ethnicity, and sexual orientation through the lens of genres and their variations and how genres reinforce or critiques stereotypes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking): Credit is allowed for only ARS 540, FMS 527 or (ARS 494, ENG 465, FMS 494 or ARS 598 Identity and World Film) |
| FMS | 543 | Artists in Film: Artists' Biopics | Examines artists' "biopics," biographical films about artists, chronologically from the subgenre's first appearance in 1936 to recent films. Explores relationships between film and history and between film and myths of creativity; major directors' attraction to artists' biopics; stereotypes of artists (genius, deviant, etc.); and how notions of creativity are inflected by gender, race and national identity. Assignments include weekly readings and film viewings and one short paper; optional documentaries and films are also available. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ARS 443 or ARS 543 or FMS 430 or FMS 543 or ARS 598 (Artists in Film: Biopics) |
| FMS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FMS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FOR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 210 | Sociology of Murder | Sociological perspectives on various forms of murder and types of murderers. Also considers forms of punishment for murder. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SB | Credit is allowed for only FOR 210 or SOC 210 |
| FOR | 286 | Principles of Forensic Science | Introduces and surveys the practices and procedures used by forensic scientists in the modern crime laboratory. Students apply lecture topics to forensic-themed laboratory activities. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Prerequisite(s): BIO 181, 182; CHM 113, 116 |
| FOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 350 | Computer Forensics | Concepts of computer forensics, forensic analysis techniques, computer forensic tools and software for forensic investigators, network forensics, data forensics, mobile device forensics, malware forensics, cyber crimes and fraud, computer security incident response. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: ACO 100 with C or better |
| FOR | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| FOR | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375; Credit is allowed for only FOR or LSC 376 |
| FOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |

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| FOR | 400 | Comparative Forensics | Familiarizes students with the comparative methods used in the forensic analysis of fingerprint, questioned document and firearms evidence. Discusses the theory and principles of individualization as assessed in forensic casework. Exposes the operation and theory of the scientific instruments used when performing comparative analysis. Reinforces learning objectives through case studies, practical exercises, outside projects and guest lectures. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181; BIO 182; CHM 113; CHM 116; Pre- or corequisite(s): BIO 305 or FOR 286; Credit is allowed for only FOR 394 (Comparative Forensics) or FOR 400 |
| FOR | 401 | Forensic Toxicology | Focuses on toxicology as it pertains to forensic science. Topics include: the history of toxicology; the pharmacodynamics and pharmacokinetics of drugs and alcohol in the human body; as well as the legal applications of toxicology. Also discusses ethics, quality control and quality assurance, and courtroom testimony (as they relate to forensic toxicology). May address other topics such as environmental toxicology, poisons, and current topics related to forensic toxicology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181; BIO 182; CHM 113; CHM 116; Pre- or corequisite(s): BCH 371; BIO 305 or FOR 286; Credit is allowed for only FOR 394 (Forensic Toxicology) or FOR 401 |
| FOR | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |
| FOR | 410 | Professional Practices in Forensic Science | Focuses on professional practices as they relate to the forensic scientist or forensics professional working in a modern crime laboratory (public or private). Topics include quality assurance programs and practices; ethics and analytical bias; the audit and accreditation processes; and the relationship with forensic science and the courtroom, to include courtroom testimony procedures. Includes oral mock court scenarios, as well as enhancing writing skills appropriate to the forensic sciences. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BIO 305 or FOR 286; ENG 102 or 105 or 108 |
| FOR | 420 | Modern Practices in Forensic Science | In-depth treatment of the practices and procedures used by forensic scientists in the modern crime laboratory. Students apply lecture topics to forensic-themed laboratory activities. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 181, 182, 305 (or FOR 286); CHM 113, 116. Pre- or corequisite(s): BCH 371, 372; LSC 347, 348 |
| FOR | 447 | Molecular Genetics Laboratory | Investigative lab involving DNA isolation, PCR, gel electrophoresis, enzyme digestion and ligation, transformation, and hybridization analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only FOR 447 or LSC 447 |
| FOR | 454 | History of Genocide | Examines the individuals and institutions responsible for the most infamous episodes of state-sanctioned violence in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | G & H | Prerequisite(s): minimum 45 hours. Credit is allowed for only FOR 454 or HST 454 |
| FOR | 475 | Principles of Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394: Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| FOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): minimum 45 hours |
| FOR | 485 | Forensic Science Capstone | Culmination course integrating all components of Forensic Science major courses demonstrating knowledge and competency in the field of forensic science. Includes Forensic Science Assessment Test (FSAT) preparation and FSAT completion. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BIO 305 or FOR 286; FOR 410; 6 additional hours of upper-division FOR coursework; senior standing |
| FOR | 486 | Peer Mentoring in the Forensic Sciences | Advanced students learn and apply mentoring skills in teaching labs. | N | SEM | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours |
| FOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | |
| FOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| FOR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | |
| FOR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |

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| FOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| FRE | 101 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 101 if credit with C or better earned in FRE 101, 102, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 102 | Elementary French | Intensive aural/oral drill in class and lab; basic grammar supplemented by simple prose readings. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Prerequisite(s): FRE 101. Students may not enroll in FRE 102 if credit with C or better earned in FRE 102, 111, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 110 | Intensive French I | Proficiency-based course that provides an intensive introduction to the French language and culture. Introduces the language and culture through a variety of topics from everyday life. Focuses on the development on all four communicative skills. Class time is spent mainly on communicative activities based on active listening and speaking practice of everyday French as used in different social situations, with much use of various print, video and Web-based media. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| FRE | 111 | Fundamentals of French | Primarily for students with two years of high school French who need review to enter second year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not enroll in FRE 111 if credit with C or better earned in FRE 101, 102, 201, 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| FRE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 201 | Intermediate French I | Grammar review, with emphasis on development of skills of speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 201 if credit with C or better earned in FRE 202, 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 202 | Intermediate French II | Continuation of grammar review with emphasis on development of skills in speaking, reading, writing, and listening comprehension. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in FRE 202 if credit with C or better earned in FRE 305 (or FRE 205), 311, 312, 321, 322, 411 or 412 |
| FRE | 210 | Intensive French II | Second semester of an intensive, proficiency-oriented language course designed to develop functional proficiency in French in a dynamic communicative environment. Class time is spent mainly on a variety of communicative activities based on active listening and speaking practice of everyday French as used in different social situations, with much use of various print, video and Web-based media. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): FRE 102 or 110 or 111 with C or better |
| FRE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 305 | Readings in French Literature | Survey of francophone literature designed to teach reading with facility and comprehension. Vocabulary building, familiarity with literary terms, their meaning and use, and introduction to textual analysis of literary genres are major elements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | FRE 202 with C or better. Students may not enroll in FRE 305 if credit earned in FRE 321 or 322 |
| FRE | 311 | Oral and Written Expression I | Practices interpersonal and interpretive writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): FRE 202 with C or better |
| FRE | 312 | Oral and Written Expression II | Practices presentational writing and speaking, emphasizing current usage and promoting facility in the expression of ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): FRE 202 with C or better |
| FRE | 315 | French Phonetics | Practice and theory of French pronunciation. Emphasizes standard French, although an overview of regional varieties is offered. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 311 |
| FRE | 319 | Business French | Introduces the structure, vocabulary, and practices of the French business world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312 |
| FRE | 321 | French Literature | Representative masterpieces and significant movements of French literature of the Middle Ages through the 18th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: FRE 305; FRE 312 |
| FRE | 322 | French Literature | Literature of the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 305; FRE 312 |
| FRE | 325 | French Language and Culture Through Film | Reviews French vocabulary and grammar through French films, with emphasis on listening comprehension and oral and written production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s) with C or better: FRE 311, 312 |
| FRE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 411 | Advanced Spoken French | Improvement of spoken French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 311; 6 hours of 300-level French |
| FRE | 412 | Advanced Written French | Improvement of composition skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: FRE 312; 6 hours of 300-level French |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FRE | 415 | French Civilization I | Political, intellectual, social, economic, and artistic development of France from its origins to the end of the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites:6 hours of upper-division French |
| FRE | 416 | French Civilization II | Political, intellectual, social, economic, and artistic development of France from the 18th century to present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | pre-requisites:6 hours of upper-division French |
| FRE | 421 | Structure of French | Phonology, morphology, syntax, semantics, and varieties of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): FRE 311, 312; SLC 201 |
| FRE | 422 | Applied French Linguistics | Applies linguistic theory and second-language acquisition theory to teaching of French. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 213 or SLC 201; FRE 311 or FRE 312 |
| FRE | 423 | French Syntax | Analyzes French syntactic structure by contemporary theoretical models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 213 or FRE 421 or SLC 201 |
| FRE | 441 | French Literature of the 17th Century | From 1600 to 1660. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 321; 6 hours of 300-level French courses |
| FRE | 442 | French Literature of the 17th Century | From 1660 to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites:FRE 321; 6 hours of 300-level French courses |
| FRE | 445 | French Literature of the 18th Century | Contributions of the philosophers and the development of the novel and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites:FRE 321; 6 hours of 300-level French courses |
| FRE | 451 | French Poetry of the 19th Century | From Romanticism to Parnassian poetry to Symbolism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 452 | French Novel of the 19th Century | From Constant, Hugo, Balzac, Stendhal, and Sand to Flaubert and Zola, with emphasis on major literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 453 | Theater of the 19th Century | From Romantic drama to the Symbolist Theater. Representative plays of Hugo, Musset, Vigny, Dumas, Becque, Rostand, Feydeau, and Mirbeau. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 461 | Modern Narrative | Representative authors from Gide to the new Nouveau Roman. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 462 | Modern Poetry | Representative authors from Mallarme to Bonnefoy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 471 | The Literature of Francophone Africa and the Caribbean | Selected prose, poetry, and drama of black authors from Africa and the Caribbean. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: FRE 322; 6 hours of 300-level French courses |
| FRE | 472 | Franco-Canadian Civilization | Study of the civilization of Quebec in particular through its history, language, literature, music, and customs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): 6 hours of 300-level French courses |
| FRE | 480 | Translation Theory and Practice | Theoretical and practical approaches to the fundamentals of meaning-based translation. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: FRE 412 |
| FRE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| FRE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| FRE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FRE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| FRE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| FRE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| FRE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 510 | Introduction to Textual Analysis | Introduces various oral and written techniques aimed at explicating literary texts. Required of all French graduate students focusing on literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only FRE 494 (Introduction Textual Analysis) or 510 |
| FRE | 521 | History of the French Language | Principal phonological, morphological, and semantic developments of French from Latin to present, with emphasis on Old and Middle French. Some familiarity with Latin is recommended. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 550 | French for Reading Knowledge | Teaches non-speakers of foreign language, or those with only basic notions of the language, how to read in a foreign language at an advanced level. Consists of a concise overview of grammar as well as reading comprehension practice for students who plan to take the Graduate Foreign Language Exam or others who would merely like to learn to read in a foreign language. Focuses only on reading and not on listening, speaking or writing as in a traditional language course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only FRE 494 (French for Reading Knowledge) or FRE 550 or FRE 598 (French for Reading Knowledge) |
| FRE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FRE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FRE | 790 | Reading And Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 100 | Introduction to Engineering | Introduces the engineering design process; working in engineering teams; the profession of engineering; engineering models, written and oral technical communication skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 2 | | |
| FSE | 104 | EPICS Gold Feasibility and Planning | First of a sequence of three one-credit service-learning courses in which EPICS GOLD groups are formed from students potentially representing all engineering, computer science and construction disciplines as well as other ASU majors, including sustainability, business, liberal arts, sciences and others. Groups of 4-5 students work together to assess the feasibility and sustainability of their proposed plans for long-term projects that solve problems and benefit clients and often, the larger community. Project work centers on the engineering, technology, computing, sustainability, business and other needs of a not-for-profit community partner; interdisciplinary group interaction is an integral element for the project success. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Fulton Schools of Engineering student. Credit is allowed for only FSE 104 or 194 (EPICS Gold I) |
| FSE | 150 | Perspectives in Grand Challenges for Engineering | Explores social dimensions of developing engineering solutions to meet local and global challenges. Introduces National Academy of Engineering (NAE) Grand Challenges for engineering and Grand Challenge Scholars Program. | N | LEC | N | GNA | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | SB | Prerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for Engineering Prerequisite(s): admission to the Engineering Grand Challenge Scholars Program. Credit is allowed for only FSE 150 or FSE 194, Perspectives on Grand Challenges for Engineering |
| FSE | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | HU | Credit is allowed for only SOS 181, FSE 181, or CEE 181 |
| FSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 201 | Engineering Undergraduate Teaching Assistant | Theory and rationale of active learning and teaching strategies that stimulate intellectual development. Leadership, teaching, teamwork and communication skills needed to facilitate effective undergraduate learning in engineering. Implementation of these skills in a classroom setting. | N | PRA | Y | YGB | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): Ira a Fulton School of Engineering major; minimum sophomore standing |
| FSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| FSE | 301 | Entrepreneurship and Value Creation | In-depth application of entrepreneurial concepts including opportunity recognition, value creation, and new business management. Students learn how to identify the needs of a market and problem solve to meet those needs through innovation. Students learn common mistakes made in the new venture process and how to work to avoid these mistakes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Prereq(s): Business undergrad; ACC 241 or 242 with C or better OR Engineering juniors OR non-business junior; min 2.50 cum ASU gpa; MGT 290 with C or better; Pre- or coreq(s): MGT 340 w/C or better if completed; Credit allowed only for FSE 301 or MGT 360 |
| FSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 399 | Cooperative Work Experience | Work periods with industrial firms or government agencies alternated with full-time course work. Not open to students from other colleges. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): Fulton Engineering undergraduate student |
| FSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| FSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| FSE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| FSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-7 | | |
| FSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-3 | | |
| FSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 501 | Technology Entrepreneurship | Fundamental principles and concepts of technology entrepreneurship. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| FSE | 502 | Strategic Enterprise Innovation | Strategies, techniques, and practices of process, product, and management innovation across the enterprise. | N | LEC | N | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 3 | | Pre-requisite: School of Engineering Graduate student |
| FSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 590 | Reading and Conf | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 594 | Conf and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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|---------|-------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|--------------------------------------------|-------|-----------------|----------------------------------------------------------------|
| FSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | Prerequisite(s): Fulton Engineering graduate student |
| FSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| FSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| FSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| FSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GBL | 10 | Business English Communications I | This course is designed to introduce students to the challenges of the degree bearing MGM/MAGAM programs at Thunderbird. Each class focuses on a different language communication fundamental (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GBL | 11 | Business English Communications II | This course is a continuation of GBL 10 in that it further develops the students to meeting the challenges of the degree bearing MGM/MAGAM programs at Thunderbird. Students may enter into GBL 11 directly with a TOEFL score of 95 Internet-Based test or better. Each class continues to improve upon one or more of the different language communication fundamentals (reading, writing, listening, speaking, and cultural adaptation) and overlaps content themes in order to prepare the student with the necessary business vocabulary, the communication skills, and the expectations required for success in a post graduate situation. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | NC Thunderbird School of Global Management | 0 | | |
| GBL | 20 | Language Foundations | Entry-level course explores the grammatical, syntactic and cultural underpinnings of the English language for international students studying English as a foreign language. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 0 | | |
| GBL | 22 | Special Programs Training | | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 24 | Special Programs Field-Based Learning | | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 25 | Special Programs English for Specific Purposes | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 26 | Special Programs Project Work | | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 27 | Special Programs Current Issues and Topics | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 28 | Academic Culture | Multidisciplinary approach to American academic culture. Designed for international students who will be matriculating into an American university and explores such themes as study skills, using academic resources and participating fully in academic life. | N | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 40 | Basic 1 Listening/Speaking | On completing the Basic 1 Listening/Speaking course, a student will be able to (1) follow directions and comprehend main ideas and supporting details of short, simple passages and conversations spoken slowly; and (2) speak informally to express basic needs, habits and descriptions in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 41 | Basic 1 Reading/Writing | On completing the Basic 1 Reading/Writing course, a student will be able to (1) recognize main ideas and find supporting details in selected reading passages of a few pages; and (2) produce a guided writing with a personal point of view, demonstrating level-appropriate control of grammar, word forms, and punctuation. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 42 | Basic 1 Structure | This course covers helping verbs, pronouns, adjectives, count/non-count nouns, and tenses (present, present progressive and simple past). | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 43 | Basic 1 Communication | International students studying English as a foreign language study the fundamentals of English communication. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 50 | Basic 2 Listening/Speaking | On completing the Basic 2 Listening/Speaking course, a student will be able to follow instructions, directions, and comprehend the main ideas and supporting details of 1-3 minute announcements and conversations with controlled speech and delivery; and (2) speak informally in basic social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |

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| GBL | 51 | Basic 2 Reading/Writing | On completing the Basic 2 Reading/Writing course, a student will be able to (1) recognize main ideas, find supporting details, and recognize the organizational pattern in short and page-length reading passages; and (2) produce a composition, based on a model, with a personal point of view, demonstrating level-appropriate control of grammar, word form, and punctuation. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 52 | Basic 2 Structure | Learn grammar for everyday writing and speaking--present, progressive and future tenses, irregular verbs in the past tense, modal verbs, pronouns, order of adjectives, and comparisons. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 53 | Basic 2 Communication | Learn to communicate effectively at the basic level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 60 | Intermediate 1 Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of 1-5 minute listening passages, conversations, instructions, and directions with controlled speech and delivery; and (2) speak informally in common social situations in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 61 | Intermediate 1 Reading/Writing | On completing this course, a student will be able to (1) recognize the main ideas and find supporting details in selected reading passages of a few pages; and (2) produce an organized composition, with a personal or an objective point of view, demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 62 | Intermediate 1 Structure | Improve grammar for everyday writing and conversation, present perfect and present perfect continuous and future tenses, noun clauses and grammar to cover frequency, duration, possibility and necessity. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 63 | Intermediate 1 Communication | International students studying English as a foreign language continue to build on the fundamentals of English communication, including working on vocabulary expansion, pronunciation, idiom decoding, fluency and verbal accuracy. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 64 | Intermediate 1 Business: Introduction | International students studying English as a foreign language, learn the fundamental vocabulary, concepts and cultural customs of business in an American context. | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 70 | Intermediate 2 Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of 5-10 minute general topic listening passages with modified speech and delivery; and (2) speak formally and informally on a variety of general topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 71 | Intermediate 2 Reading/Writing | On completing this course, a student will be able to recognize the main ideas and supporting details and distinguish between fact and opinion in a reading passage of several pages; and (2) produce a composition, based on a writing task, with an objective point of view demonstrating level-appropriate control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 72 | Intermediate 2 Structure | Focus on an overview of all the tenses. This course also covers passive voice and sequence of tenses with adverbial clauses. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 73 | Intermediate 2 Communication | Learn to communicate effectively at the intermediate level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 74 | Intermediate 2: Business Management | International students studying English as a foreign language discover key concepts and ideas related to business management. Students have the opportunity to speak, read and write about, as well as listen to, accessible levels of business management materials, including work and motivation, company structure and recruitment. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 75 | Intermediate American Culture Studies Special Topic | | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 76 | Intermediate Bridge to ASU | | N | LEC | N | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 80 | Advanced 1 Listening/Speaking | On completing the Advanced 1 Listening/Speaking course, a student will be able comprehend the main ideas and supporting details of brief academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |

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| GBL | 81 | Advanced 1 Reading/Writing | On completing the Advanced 1 Reading/Writing course, a student will be able to (1) recognize the main ideas and supporting details and determine logical inferences in selected general reading passages of several pages; and (2) produce a composition, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 82 | Advanced 1 Structure | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 90 | Advanced 2 Core Listening/Speaking | On completing this course, a student will be able to (1) comprehend the main ideas and supporting details of complex but abbreviated academic lectures and instructions spoken naturally; and (2) speak formally and informally on academic topics in a comprehensible manner demonstrating level-appropriate fluency and control of pronunciation, grammar, and vocabulary. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 91 | Advanced 2 Core Reading/Writing | On completing this course, a student will be able to (1) recognize the main ideas and supporting details, and determine logical inferences in authentic and selected academic and general reading passages of several passages; and (2) produce a well-developed essay, based on an assigned writing task, with an objective point of view, demonstrating level-appropriate word choice and control of mechanics and grammar. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 9 | | |
| GBL | 92 | Advanced 2 Structure | This course covers complex sentence structure, participial phrases, reduced adjective clauses and appositives, infinitives and gerunds, hypothetical conditionals, and the subjunctive. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 93 | Advanced Communication Special Topic | Learn to communicate effectively at the advanced level in a variety of everyday situations and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 94 | Business English Special Topic | Learn to communicate effectively in a variety of business situations and develop English skills necessary for success in today's business world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 95 | Advanced American Culture Studies | Learn about American culture and develop communication skills necessary for success in today's world. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 96 | Academic English Studies Special Topic | Learn the Academic English necessary for success at an American university or college. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | 98 | Professional English Special Topic | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Office of the Provost | NC American English and Culture Program | 3 | | |
| GBL | X99 | International Teaching Assistants Training | Offered to international students who are candidates for a teaching assistantship. Non-credit semester-long seminar addresses language improvement, teaching skills and cross-cultural training. | N | LEC | Y | AUD | Office of the Provost | NC American English and Culture Program | 3 | | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 102 | Introduction to Human Geography | Systematic study of human use of the Earth. Spatial organization of economic, social, political, and perceptual environments. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Elmyr Ed |
| GCU | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | Credit is allowed for only HST or GCU 114 |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SB & G | |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SB & G | |
| GCU | 121 | World Geography | Description and analysis of areal variations in social, economic, and political phenomena in major world regions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SB & G | |

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| GCU | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |
| GCU | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GCU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| GCU | 241 | The Global Economy in Transition | Production, distribution, and consumption of various types of commodities of the world and relationships to the activities of humans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 15 hours |
| GCU | 253 | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 253 | Introduction to Cultural and Historical Geography | Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 322 | Geography of U.S. and Canada | Spatial distribution of relevant physical, economic, and cultural phenomena in the United States and Canada. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 323 | Geography of Latin America | Spatial distribution of relevant physical, economic, and cultural phenomena in South, Middle, and Caribbean America. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as numerous analytical essays and an in-depth research paper, in addition to regular tests and quizzes, are required. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisite: Minimum 45 hours |
| GCU | 325 | Geography of Europe | Broad and systematic overview of Europe, emphasizing physical, economic, and cultural phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 326 | Geography of Asia | Spatial distribution of relevant physical, economic, and cultural phenomena in Asia, excluding the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 328 | Geography of Middle East and North Africa | Spatial distribution of relevant physical, economic, and cultural phenomena in the Middle East and North Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 332 | Geography of Australia and Oceania | Spatial distribution of relevant physical, economic, and cultural phenomena in Australia, New Zealand, and Pacific Islands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 344 | Geography of Hispanic Americans | Examines the homelands, migrations, settlements, landscapes, roles, and selected cultural traditions of Hispanic Americans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 350 | The Geography of World Crises | Contemporary world crises viewed from a perspective of geographic concepts and techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |

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| GCU | 351 | Population Geography | Demographic patterns; spatial, temporal, and structural investigation of the relationship of demographic variables to cultural, economic, and environmental factors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | Pre-requisites: MAT 117,119, 142, 170 or 210 with C or better; Credit is allowed for only GCU 351 or SBS 351 |
| GCU | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| GCU | 357 | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 357 | Social Geography | Environmental perception of individuals and groups. Stresses the spatial aspect of social and physical environments. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | 359 | Cities of the World I | Historical evolution of urban patterns and structures in the Middle East, India, Southeast Asia, China, Japan, and Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G & H | |
| GCU | 360 | Cities of the World II | Historical evolution of urban patterns and structures in Latin America, North America, Sub-Saharan Africa, and Australasia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 361 | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 361 | Urban Geography | External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| GCU | 364 | Energy in the Global Arena | Production, transportation, and consumption of energy, emphasizing the electric power industry and its environmental problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 373 | Introduction to Geographic Information Science | Introduces theoretical and computer-based aspects of Geographic Information Systems, involving data analysis and map generation. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | SG | Pre-requisite: PSY 230 or SBS 304 |
| GCU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 414 | Teaching Geography Standards | Introduces Arizona Geography Standards for K-12 educators, emphasizing exciting curricula and illustrated with best practices by master teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 421 | Geography of Arizona and Southwestern United States | Geography of the Southwest with an emphasis on Arizona. Divided into physical geography, history, people, and economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & C | |
| GCU | 424 | Geography of Mexico and Middle America | Central America and Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 425 | Geography of the Mexican American Borderland | Geography of a binational and bicultural region. Examines settlement, boundary issues, ethnic subregions, population change, industrial development, and urban growth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or SB) & G | |
| GCU | 426 | Geography of Russia and Surroundings | Examines the geography of Russia and other post-Soviet states. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 432 | Geography of China | Examines the physical, economic, cultural, social, demographic, agricultural, political, historical, and environmental aspects of the geography of China. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB & G | |
| GCU | 433 | Geography of Southeast Asia | Examines the biophysical and social features of Southeast Asian nations and peoples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GCU | 441 | Economic Geography | Spatial distribution of primary, secondary, and tertiary economic and production activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |

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| GCU | 442 | Geographical Analysis of Transportation | Networks, modes, economics, and flows at the urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 474 | Public Land Policy | Geographic aspects of federal public lands, policy, management, and issues. Emphasizes western wilderness and resource development problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SB | |
| GCU | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GCU | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| GCU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GCU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GCU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GCU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| GCU | 496 | Geographic Research Methods | Scientific techniques used in geographic research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisites: GPH 111, GCU 102, GCU 121 and GIS 205 with C or better |
| GCU | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GCU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GCU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GCU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| GCU | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social data collection methodologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GCU 514 or SOS 514 |
| GCU | 515 | Human Migration | Economic, political, social, and geographic factors underlying population movements. Migration selectivity, streams and counter-streams, labor migration, and migration decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 529 | Contemporary Geographic Thought | Comparative evaluation of current philosophy concerning the nature and trends of geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 542 | Geographical Analysis of Transportation | Examines the geographical aspects of transportation systems. Looks at the geography of networks; transport costs and rates; different modes of transport, trade, economic development, and technology. Studies the movement of freight and passengers at the individual, urban, national, and international scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 585 | Geographic Research Design and Proposal Writing | Prepares students to undertake creative geographic research culminating in the generation of new knowledge. Serves as a foundation for the student in achieving the objective of a productive and successful degree. To accomplish this, instruction stresses a research framework, ethical practice, and the generation of an original research proposal. Specific learning objectives are: to produce an area of specialization statement, literature review, problem statement, description of methods and final proposal; to develop the skills needed to conceive and plan a research project; to communicate ideas effectively in written and oral form; to develop and articulate informed opinions about research designs; to learn about academic publishing format and process; and to understand and engage in ethical research practices. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student |
| GCU | 586 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GCU | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GCU | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 596 | History of Geographic Thought | Historical development of geographic thought from pre-Greek days to the early 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 671 | Introduction to Geographic Teaching | Intensive course in geographic education, scientific method in research on geographic education, research trends, resources for teaching, best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 672 | Physical Geography for Teachers | Transfer of matter and energy exhibited in the Earth's climate, hydrology, soils, biogeography, and landforms; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 673 | Human Geography for Teachers | Analyzes cultural, economic, urban, historical, transportation, population, political, and development geography; case studies; virtual field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 674 | Geographic Techniques for Teachers | Introduces geographic techniques, including GPS, GIS, remote sensing, cartography, qualitative, and field methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 675 | World Geography for Teachers | Systematic overview of geographic knowledge about different world regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 676 | North American Geography for Teachers | Systematic overview of geographic knowledge about different North American regions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 677 | Geography Across the Curriculum | Intensive course on intergrating reading, writing, and mathematics standards with geography content; selected case studies; best practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GCU | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GCU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 101 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Credit is allowed for only GER 101 or 111 |
| GER | 102 | Elementary German | Reading, writing, speaking, and understanding of basic German, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |
| GER | 110 | Intensive German I | Students learn to read, listen, write and speak German. Develops ability to communicate in German using a variety of tools. Uses German to ask and answer questions; name and describe persons, things, places and events; deals with certain situations; narrates orally and in writing; writes letters and postcards; fills out forms; and comprehends some texts. Expands knowledge of the cultures of the German-speaking countries. Students contribute to the class discussions what they might already know. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | G | |
| GER | 111 | Fundamentals of German | Primarily for students with two years of high school German who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: GER 101 with C or better; Credit is allowed for only GER 102 or 111 |
| GER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Maximum 25 hours |
| GER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 201 | Intermediate German | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 102 or 111 with C or better |
| GER | 202 | Intermediate German | See GER 201 | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: GER 201 with C or better |
| GER | 210 | Intensive German II | Helps develop reading, writing, listening and speaking skills and strategies with activities both inside and outside of class. Guides student further into learning about the cultures of the German-speaking countries. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | G | Prerequisite(s): GER 102 or 110 or 111 with C or better |
| GER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 310 | Advanced German Grammar | Intensive, contextualized advanced German grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 202 with C or better |
| GER | 311 | German Conversation | Expansion of idiom through oral practice dealing with contemporary articles, essays and stories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: GER 202 with C or better |

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| GER | 312 | Readings in German Culture | Provides strategies for building reading proficiency in German through longer cultural texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 313 | German Composition | Intensive practice in writing, emphasizing style and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 315 | Germanic Mythology | Religious and spiritual beliefs and practices of the ancient Germanic peoples as reflected in their culture, including the pantheon of their gods, as well as the reception of these beliefs through and including contemporary times. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ENG 102, 105, or ENG 108 with C or better; Credit is allowed for only GER 315 or 394 (Germanic Mythology) |
| GER | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 310 with C or better |
| GER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 412 | Advanced German | Improvement of writing and speaking ability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): GER 313 with C or better |
| GER | 415 | German Civilization | Aspects of political, social, and cultural life of the German-speaking world from the beginning through 1600. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 416 | German Civilization | From 1600 through 1945. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisite: A 300-level German course |
| GER | 421 | German Literature Survey, 800-1800 | From the beginning to Classicism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): 6 hours of 300-level German courses with C or better |
| GER | 422 | German Literature Survey, 1800-Today | From Romanticism to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): 6 hours of 300-level German courses with C or better |
| GER | 431 | German Humor | Popular and literary texts (collections of jokes, pranks and comedies) in the print and visual media provide a basis of comparison for students to reflect critically on the function of humor in German culture from the sixteenth century until the present. Exposes the different types and functions of German humor and understands both the historical and the contemporary theoretical debate on the study of (German) humor. Taught almost exclusively in German, with reading and writing assignments done in the target language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: Two 300-level GER courses with C or better; Credit is allowed for only GER 431 or 494 (German Humor and Comedy) |
| GER | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| GER | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JUST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| GER | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| GER | 447 | German Modernism | Examines examples of modernism in literature, art and film from German-speaking Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only GER 447 or SLC 447 or GER 494 (German Modernism) |
| GER | 453 | German Literary Masterpieces on Film | Film and literature in their correlation to each other and to cultural, political, and social trends in German-speaking countries. Special arrangements for graduate students and those without a knowledge of German. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | |
| GER | 455 | Multi-Kulti: Multiculturalism Through Film | Examines how ethnic identities are perceived, constructed and marketed as well as how they perceive themselves and the "others." Critically engages with such concepts as migration, assimilation, citizenship, hybridity and authenticity. Focuses on exemplary films, including comparisons with minority experiences in other countries. Through film and other material on the topic, will learn to contextualize recruitment of guest workers, xenophobia and racism, citizenship law, immigration and national identity, the institutions of multiculturalism, religion, the private sphere, multilingualism, popular culture and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GER 455 or SLC 455 or GER 494 (Multi-Kulti: Multiculturalism in Central Europe) or SLC 494 (Multi-Kulti: Multiculturalism in Central Europe) |
| GER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| GER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| GER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 521 | History of German Language | Linguistic development of German from the earliest records to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 550 | German for Reading Knowledge | Teaches non-speakers of foreign language, or those with only basic notions of the language, how to read in a foreign language at an advanced level. Consists of a concise overview of grammar as well as reading comprehension practice for students who plan to take the Graduate Foreign Language Exam or others who would merely like to learn to read in a foreign language. Focuses only on reading and not on listening, speaking, or writing as in a traditional language course. | N | LEC | Y | GNA | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GER 494 (German for Reading Knowledge), GER 598 (German for Reading Knowledge), or GER 550 |
| GER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 201 | Spatial Thinking | Introduces spatial thinking, a cross-disciplinary foundation for geographic information science (the science of dealing with spatial/geographical data; their manipulation, interpretation and use in problem solving); geospatial technologies (the specific technologies underpinning geographic information science); and spatial analysis (the science of solving spatial problems). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |

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| GIS | 205 | Geographic Information Technologies | Introduces modern geographic information technologies, including cartography, GIS, remote sensing, global positioning systems, and statistical analyses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | |
| GIS | 211 | Geographic Information Science I | History and basic aspects of GIS including map and data file structure, conversions, and synthesis with a computerized environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | |
| GIS | 220 | Mathematical Principles in GIS | Covers the basic math principles needed to excel in GIS and spatial analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: MAT 265 (or MAT 270) with C or better |
| GIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 311 | Geographic Information Science II | GIS as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval, and graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | CS | Prerequisite(s): GIS 211 with C or better |
| GIS | 321 | Programming Principles in GIS | Basic principles of programming for GIS in python covering data processing, analysis, and application development. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: CSE 110 |
| GIS | 322 | Spatial Data Structures and Algorithms | Fundamental data structures and algorithms for the integration, management, processing and analysis of geographically referenced data. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 321 |
| GIS | 341 | Introduction to Cartography and Georepresentation | Study and creation of maps. Fundamental mapping principles (projection, scale, generalization, symbolization) and computer-based cartographic production. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): minimum 45 hours |
| GIS | 351 | Air Photo Interpretation | Subset, remote sensing, includes photography, films, aerial geometry, image components, stereoscopy, photogrammetry, ground truthing; interpret physical, cultural, economic, intelligence information. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): minimum 45 hours |
| GIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 412 | Spatial Decision Support Systems | Theoretical and technical requirements for implementing spatial decision support tools. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): CSE 110 with C or better; GIS 311 with C or better |
| GIS | 431 | Spatial Databases | Covers data modeling concepts, the relational data model for the storage and retrieval of spatial and nonspatial information. The data retrieval emphasizes the industry-standard query language SQL and Spatial Query Languages. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 311; GIS 322 |
| GIS | 441 | Geographics: Interactive and Animated Cartography and Geovisualization | Advanced cartography, stressing influence and application of the computer on geographic representation. Emphasizes creation of maps for the Internet. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s): GIS 321 |
| GIS | 461 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| GIS | 462 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): GIS 211 or 461. Credit is allowed for only GIS 462 or GIS 562 or PUP 482 or PUP 582 or PUP 598 (Location Modeling) |
| GIS | 470 | Statistics for Geographers | Statistical techniques applied to the analysis of spatial distributions and relationships. Introduces models and theory in geography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | CS | Prerequisite(s) with C or better: MAT 117 (or MAT 119, 142, 170, 210, 211, 251, 265 or 270) |

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| GIS | 471 | Geographic Information Analysis | Basics of spatial data analysis. Topics include point pattern analysis, spatial autocorrelation, spatial regression, and kriging. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 470 |
| GIS | 472 | Spatial Regression Analysis | Students gain insight into the scope of spatial regression methods, apply them in an empirical setting, and properly interpret the results of spatial regression analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: GIS 471; Credit is allowed for only GIS 472 or GPH 598 (Spatial Regression) |
| GIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GIS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 501 | GeoDesign in Practice | Covers the basic topics of GeoDesign in practice including data, analysis, geocoding, mapping and projected implementation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): GIS 601 and 602 (or PUP 576) |
| GIS | 505 | GeoDesign Principles | Systematic exploration and evaluation of alternative complex human-environmental systems using spatially and temporally explicit theories, data and methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): GIS 601 and 602, or PUP 576; Credit is allowed for only GIS 505 or PUP 505 |
| GIS | 512 | Spatial Decision Support | Designs and implements a spatial decision support system and analyzes and understands the theoretical underpinnings that form these systems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 412 or GIS 512 |
| GIS | 515 | GIS Workshop | GIS as a tool to address large, multifaceted problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GIS 515 or PUP 576 |
| GIS | 521 | Geographic Information Science III | In-depth look at programming within GIS. Focuses on programming and methodology, utilizing specific software, and basic scientific computing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 531 | Spatial Databases | Advanced data modeling concepts, the relational data model for the storage and retrieval of spatial and non-spatial information. Data retrieval emphasizes the industry-standard query language SQL and spatial query languages. Covers research topics for graduate students. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only GIS 431 or GIS 531 |
| GIS | 561 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GCU 494 (Optimization Fundamentals) or GCU 598 (Optimization Fundamentals) or GIS 461 or GIS 561 or PUP 481 or PUP 581 |
| GIS | 562 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GIS 561; Credit is allowed for only GIS 462, 562, PUP 482, 582, or 598 (Location Modeling) |

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| GIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | |
| GIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 601 | Introduction to Geographic Information Systems | Introduces GIS theory and practice for professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 602 | Intermediate GIS | Introduces visualization, spatial analysis and open source tools. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 603 | Spatial Statistics and Modeling | Introduces spatial statistics and modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 604 | Implementation in the Corporate and Public Sectors | GIS use in the corporate and public sectors including proposal development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 605 | GIS Project Planning and Implementation | Moving from project proposal to implementation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 606 | GIS Project Presentation | Development of technical reports and presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 610 | Programming the GIS Environment | Programming fundamentals for desktop GIS and custom applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |

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| GIS | 630 | GIS Technologies | Uses technology for GIS data collection and management. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: graduate MAS-GIS major |
| GIS | 640 | GIS for Business | Uses of GIS in business practice including site suitability, demographic data and business analyst. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 650 | GIS for the Internet | Programming GIS for the Internet and mobile applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): MAS Geographic Information Systems major |
| GIS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GIS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 135 | Graphic Communications | Technologies and processes involved in the design, image generation, transmission, and industrial production of graphic information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 210 | Creative Thinking and Design Visualization | Fundamental methods, concepts, and techniques of creative thinking, design visualization, and problem solving, including communication and societal influences. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 211 | Introduction to Video Game Art | 2D and 3D art assets for video games. Areas covered: classic pixel art, seamless texturing and tiling, sprite animation, 3D virtual studio, box modeling. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Credit is allowed for only GIT 211 or 294 (Intro to 2D-3D Video Game Art) |
| GIT | 215 | Introduction to Web Authoring | Graphic user interface planning and evaluation using industry-standard languages; graphics, color layout and file format considerations. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 230 | Digital Illustration in Publishing | Raster and vector illustration in publishing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | |
| GIT | 237 | Web Content Design | User-centered design principles for visual content on the World Wide Web with emphasis on usability, page architecture, search engine optimization, coding, scripting and interactivity. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 215; GIT 230 or Prerequisite(s): BAS in Graphic Information Technology or BAS in Internet and Web Development student |
| GIT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 295 | Introduction to Technical Imaging | Explores imaging technologies utilized in industry. Covers basic imaging concepts, chip technologies, optics, motion analysis, high-speed video, thermal imaging, and science relating to light and latent imaging. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Undergraduate student; Credit is allowed for only GIT 295 or 294 (Introduction to Technical Imaging) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GIT | 303 | Digital Publishing | Web and print publication design and production using industry-standard composition software, proofing, and output devices. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development. |
| GIT | 312 | 3-D Computer Graphics Modeling and Representation | 3-D modeling applications: modeling for video games, mapping techniques, texturing, box modeling, geometric representation, strategies and assemblies. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | CS | Pre-requisites: GIT 211 or GIT 294 (Intro to 2D-3D Video Game Art) |
| GIT | 314 | Multimedia Design, Planning and Storyboards | The creative process of generating ideas, conceptualizing projects, planning, designing, story boarding, and presenting interactive multimedia products. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 210, GIT 215 and GIT 230 OR CST 200 and IFT 301 OR BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 315 | Digital Video Techniques | Covers video production, including planning, pre-production, production, post-production and online video technologies and how video is an integral part of the graphic information industry. Concentrates on commercial and client-driven video production. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 230; Credit is allowed for only GIT 315 or GIT 294 (Intro to Video Content) |
| GIT | 333 | Printing Technology | Theory and application of sheet and web press technology for offset-lithography, flexography, screen process, and digital printing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite: GIT 303 |
| GIT | 334 | Image Editing and Manipulation | Theory and application of advanced image editing and raster techniques for reproduction and dissemination. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 230 or Graphic Information Technology or Internet/Web Development BAS major |
| GIT | 335 | Computer Systems Technology | Computer technology: hardware, software, storage, networking, Internet, telecommunications, and information systems. Requires independent research. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Minimum 45 hours; Not for credit for the BS/GIT degree |
| GIT | 340 | Information Design and Usability | Design and technology solutions for increasing Website usability and methods of organizing information to improve the user experience. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): junior standing; Credit is allowed for only GIT 340 or GIT 494 (Information Design and Usability) |
| GIT | 384 | Commercial Photography | Digital image capture, and output in a commercial studio emphasizing publishing workflow. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: GIT 230 or BAS student in Graphic Information Technology or Internet/Web Development |
| GIT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 402 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic technology perspective. Emphasizes how, why, and when new media can be used to enhance a Web site and the user's experience. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 (or GIT 337) OR BAS student in Graphic Information Technology or Internet/Web Development. Credit is allowed for only GIT 402, 502 or 494 (New Media Internet Technologies) |
| GIT | 411 | Computer Animation | 3-D computer animation methods: rigging for video games, principles of animation, loops, skinning, blending, advanced modeling and motion. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 312 |
| GIT | 413 | Professional Portfolio Design and Presentation | Digital media portfolio design and production: planning, audience analysis, media selection, authoring, media formats, production, copyright considerations, marketing, and delivery. Requires capstone group project. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): Graphics Information Technology major; senior standing; GIT 303 |
| GIT | 414 | Web Site Design and Internet/Web Technologies | Web site design, authoring, standards, protocols, tools, and development techniques for commercial client-sided Web-based graphic information systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or Applied Science (Graphic Information Technology) BAS or Applied Science (Internet & Web Development) BAS major; Credit is allowed for only GIT 414 or GIT 515 or GIT 598 (Website Design and Internet/Web) |
| GIT | 417 | Advanced Web Markup and Scripting | Industry-standard programming languages and techniques to create interactive graphic information Web sites and applications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 237 or Applied Science (Graphic Information Technology) BAS or Applied Science (Internet & Web Development) BAS major; Credit is allowed for only GIT 417 or GIT 519 or GIT 598 (Advanced Internet Programming) |
| GIT | 418 | Multimedia Authoring, Scripting and Production | Production of multimedia projects using industry-standard authoring applications: client considerations and project documentation; user interface design, interactivity, media, and databases. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 417 |
| GIT | 432 | Graphic Industry Business Practices | Business practices related to press/prepress/Web industries: trade customs, cost analysis, marketing and management approaches. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: Graphics Information Technology Senior student |
| GIT | 435 | Website and E-Commerce Strategies | Internet Web site management, security, marketing, and e-commerce business models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 414 |
| GIT | 437 | Color Reproduction Systems | Scientific analysis for the engineering of color reproduction systems and color models used in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 334 |
| GIT | 450 | Digital Workflow in Graphic Industries | Digital production system analysis for content creation, automation output of graphic information to print and Web, including networking and job tracking. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): GIT 303; GIT 237 (or GIT 337) OR Graphic Information Technology BAS or Internet & Web Development BAS major |
| GIT | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): minimum 90 hours; Pre- or corequisite(s): GIT 413 or Applied Science (Graphic Information Technology) BAS major or Applied Science (Internet & Web Development) BAS major |
| GIT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | |
| GIT | 490 | Advanced Commercial Photography | Studio-based class focusing on set design, advanced photographic techniques, raw workflow, marketing, business, and digital rights management. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisite: GIT 384 |

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| GIT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| GIT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GIT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | |
| GIT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-7 | | |
| GIT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-3 | | |
| GIT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 502 | New Media Internet Technologies | Project-based exploration of new media Internet technologies from a graphic information technology prospective. Emphasizes how, why and when new media can be used to enhance a Web site and the user's experience while maintaining branding cohesively across all technologies. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only GIT 402, 502 or 598 (New Media Internet Technologies) |
| GIT | 515 | Website Design and Technologies | Standards, tools and techniques for creating websites, with emphasis on designing for multiple devices and systems. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only GIT 414 or GIT 515 or GIT 598 (Website Design and Internet/Web)s |
| GIT | 519 | Advanced Scripting for the Web | Uses industry-standard markup and scripting languages to develop interactive websites and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only GIT 417 or GIT 519 or GIT 598 (Advanced Internet Programming) |
| GIT | 538 | Personnel Development for the Graphics Industry | Employee training and development specific to production and management in the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 540 | Cross-Media Design Solutions | Universal design theory, creative problem solving, and case study applications for print, Web, and new media products of the graphics industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 542 | Usability and User Experience | Design and technology solutions focusing on how information is organized graphically to communicate and how website usability is employed to improve human interaction with inline information. | N | LEL | N | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Prerequisite(s): graduate student in Technology (Graphic Info Tech) |
| GIT | 573 | Color Metrology | In-depth study and analysis of systems used to manage color reproduction in the graphic arts industry and information technology. | N | LEL | N | GNA | Ira A. Fulton Engineering | Graphic Information Technology | 3 | | Pre-requisites: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Color Reproduction Systems) |
| GIT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Graphic Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GIT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Graphic Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GIT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Graphic Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 101 | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | |
| GLG | 101 | Introduction to Geology I (Physical) | Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Students must complete both GLG 101 and GLG 103 to receive an SQ (general studies). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | |
| GLG | 102 | Introduction to Geology II (Historical) | Basic principles of applied geology and the use of these principles in the interpretation of geologic history. Both GLG 102 and 104 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & H | |
| GLG | 103 | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | |
| GLG | 103 | Introduction to Geology I-Laboratory | 3 hours lab, some field trips. Both GLG 101 and 103 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | |
| GLG | 104 | Introduction to Geology II-Laboratory | Lab techniques involving map interpretation, cross sections, and fossils. Both GLG 102 and 104 must be taken to secure SG general Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | Co-requisite: GLG 102 |
| GLG | 108 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| GLG | 108 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| GLG | 110 | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SG & G | |
| GLG | 110 | Dangerous World | Geological studies as they apply to interactions between humans and Earth. Includes geological processes and hazards, resources, and global change. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SG & G | |
| GLG | 111 | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SG | |
| GLG | 111 | Dangerous World Laboratory | Basic geological processes and concepts. Emphasizes geology-related environmental problems concerning Arizona. Both GLG 110 and 111 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SG | |
| GLG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GLG | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |

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| GLG | 301 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; GLG 101, GLG 102, GLG 110, GPH 111 or SES 121; MAT 117 or higher. Credit is allowed for only GLG 301, GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| GLG | 304 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| GLG | 305 | Dynamic Earth | Emphasizes the link between Earth's interior and surface, focusing on Earth systems and cycles, such as observation and modeling of the geometry and motions of Earth's rigid outer shell, the tectonic plates, and how they are coupled to the geologic record, the nature of Earth's internal structure, and convective motions within the planet. Specific topics include: (1) essentials of Earth's dynamic interior (models for physical and chemical evolution); (2) essentials of lithosphere evolution (cooling of oceanic plates, the age of the Earth, and continent formation); (3) multi-scale tectonics (plate tectonics, continental deformation, mountain building, tectonic context of metamorphism); (4) essentials of volcanism in a tectonic context; (5) geodynamic context of plate boundaries; and (6) chemical cycles (role of the solid crust and mantle for transporting, storing, and cycling water and minerals). Provides an essential global context for studies of Earth and Environmental Science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 181 or 182 or 281 or 282 or CHM 101 or 107 or 113 or 114 or PHY 101 or 111 or 121 or 150); GLG 101 or SES 121; MAT 170 or 171 or 210 or 251 or 265 or 270. Credit is allowed for only GLG 305 or GLG 310 |
| GLG | 310 | Structural Geology | Geologic structures and the mechanical processes involved in their formation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 101 or SES 121 with C or better; MAT 170, 171, 210, 251, 265 or 270 with C or better; Credit is allowed for only GLG 305 or GLG 310 |
| GLG | 321 | Mineralogy | Crystal chemistry, crystallography, mineral identification, origin and occurrence of minerals, systematic mineralogy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | Prerequisite(s): CHM 113 (or both CHM 111 and 117 or 114) with C or better; MAT 170, 210, 265 or 270 with C or better; |
| GLG | 325 | Oceanography | Introduces marine geology, chemistry, and physical and biological oceanography. Methods of oceanic exploration, environmental and social aspects of oceans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: BIO 100 (or BIO 182 or 282 or GLG 101 or SES 121); CHM 101 (or CHM 113 or 114). Credit is allowed for only BIO 325 or CHM 385 or GLG 325 |
| GLG | 327 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone--in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisites with C or better: GLG 101 & 103 or SES 121 & 123; MAT 170 or 171 or 210 or 251 or 265 or 270; PHY 101 or 111 or 121 or 150 or CHM 101 or 107 or 113 or 114 or BIO 100 or 181 or 182 or 281 or 282. Credit is allowed for only GLG 327 or SOS 374 |
| GLG | 362 | Geomorphology | Land forms and processes that create and modify them. Lab and field study of physiographic features. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 101 or SES 121 with C or better; MAT 266 or 271 with C or better |
| GLG | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 400 | Earth and Space Exploration Colloquium | Presentation of recent research by faculty and guests. Written assignments required. 1 semester hour required for Geological Sciences majors; may be repeated for a total of 2 semester hours. | N | LEC | Y | YGB | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| GLG | 404 | Fundamentals of Planetary Geology | Surveys planetary topics, including impacts, tectonics, and volcanism on planetary objects, and use of spacecraft data, including geological mapping. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 101 (or GLG 102) or SES 121 (or SES 122) with C or better |
| GLG | 406 | Geology of Mars | Geological evolution of Mars through analyses of spacecraft data, theoretical modeling, and study of terrestrial analogs; emphasizes current work. Possible field trips to examine Arizona geology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 410 | Computers in Geology | Geological computer skills including data processing, visualization, presentation, numerical analysis, software and hardware applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Pre-requisites: GLG 101 or SES 121 with C or better |
| GLG | 418 | Geophysics | Solid earth geophysics; geomagnetism, gravity, seismology, heat flow. Emphasizes crust and upper mantle. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: MAT 272 or 267 with C or better; PHY 131 and 132 or PHY 151 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GLG | 419 | Geodynamics | Emphasizes application of continuum principles to geological problems, including lithospheric stresses, heat transfer, fluid mechanics, and rock rheology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite(s): MAT 267 or MAT 272 with C or better; PHY 131 and 132 (or PHY 151) with C or better |
| GLG | 420 | Volcanology | Distribution of past and present volcanism, types of volcanic activity, mechanism of eruption, form and structure of volcanoes, and geochemistry of volcanic activity. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: Engineering, Math or Science major; Minimum Junior standing |
| GLG | 422 | Planetary Volcanology | Studies the effects of planetary environments and magma compositions on styles of volcanism and the nature of volcanic products on the terrestrial planets and outer planet satellites. Overview of volcanism on specific planetary objects, analysis of spacecraft image data, basic mathematical volcanic modeling, and reviews of key papers. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): AST 111 or AST 112 or GLG 101 or 102 or 110 or GPH 111 or SES 121; MAT 170 or MAT 171 or 210 or 251 or 265 or MAT 270 with C or better. Credit is allowed for only GLG 422 or GLG 494 (Planetary Volcanology) |
| GLG | 424 | Petrology | Origin of igneous and metamorphic rocks. Optical mineralogy, hand specimen identification, and thin-section analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): GLG 321 with C or better |
| GLG | 430 | Paleontology | Introduces concepts and analytical techniques in biogeology, paleobiology, paleoecology, and paleoenvironmental reconstruction from the fossil record. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: GLG 102 (or SES 122) with C or better; GLG 104 (or SES 124) |
| GLG | 435 | Sedimentology | Origin, transport, deposition, and diagenesis of sediments and sedimentary rocks. Physical analysis, hand specimen examination, and interpretation of rocks and sediments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s) with C or better: GLG 102 (or SES 122), 321 |
| GLG | 441 | Ore Deposits | Origin, occurrence, structure, and mineralogy of ore deposits. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites with C or better: GLG 101 (or SES 121); GLG 310 (or 321) |
| GLG | 451 | Field Geology I | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; Pre/Co-requisite: GLG 321 |
| GLG | 452 | Field Geology II | Geological mapping techniques using topographic maps and aerial photos. Intensive field-based instruction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Pre-requisites: GLG 310 with C or better; GLG 321 with C or better; GLG 451 with C or better |
| GLG | 455 | Advanced Field Geology | Geologic mapping in igneous, sedimentary, and metamorphic terrains of the Basin and Range province of Arizona. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3-4 | | Pre-requisite: GLG 310 with C or better; Pre/Co-requisite: GLG 451 with C or better if completed |
| GLG | 460 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| GLG | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and minerals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 464 | Solving Environmental Problems | Capstone course intended primarily for seniors in the Earth and Environmental Studies degree program. Hybrid self-study design project workshop guided by faculty, in which student teams research and develop plans for a viable solution to a real environmental problem in the American Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): Earth and Environmental Sciences BA seniors; GLG 305, 325 or 327 with C or better |
| GLG | 470 | Hydrogeology | Geology of groundwater occurrence, aquifer and well hydraulics, water chemistry and quality, contaminant transport, remediation. Emphasizes quantitative methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 471 | Hydrology | Descriptive and quantitative hydrology; hydrologic cycle, models, and systems. Rain-runoff models. Hydrologic design. Concepts, properties, and basic equations of groundwater flow. Emphasizes quantitative methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): CEE 341 (or MAE 340) or GLG 362 with C or better; Credit is allowed for only CEE 440 or GLG 471 or GLG 490 (Hydrology) |
| GLG | 481 | Geochemistry | Origin and distribution of the chemical elements. Geochemical cycles operating in the Earth's atmosphere, hydrosphere, and lithosphere. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisite: CHM 341, CHM 346 or GLG 321 with C or better. Credit is allowed for only CHM or GLG 481 |
| GLG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| GLG | 485 | Meteorites and Cosmochemistry | Chemistry of meteorites and their relationship to the origin of the Earth, solar system, and universe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: CHM 341, CHM 346, or GLG 321 with C or better; Credit is allowed for only GLG 485 or CHM 485 |
| GLG | 489 | Field Geochemistry | Explores basic field measurements and sampling techniques for environmental systems, with a focus on carbon cycling in the Colorado River. Surveys a variety of geochemical principles, including: equilibrium aqueous speciation, acid-base chemistry, solution-mineral equilibrium systems, oxidation-reduction reactions, organic and environmental geochemistry and biogeochemical cycles. Applies chemical principles and analytical techniques to answer questions about environmental systems and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | L | Prerequisite(s): CHM 302 or GLG 321 or GLG 481 with C or better; Credit is allowed for only CHM 489 or GLG 489 or GLG 490 (Field Geochemistry) |
| GLG | 490 | Topics in Geology | Special topics in a range of fields in geology. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| GLG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| GLG | 495 | Undergraduate Thesis | Guided research culminating in the completion and presentation of an undergraduate thesis based on supervised research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | |
| GLG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| GLG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-7 | | |
| GLG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| GLG | 500 | Earth & Space Exploration Colloquium | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 581 | Isotope Geochemistry | Geochemistry and cosmochemistry of stable and radioactive isotopes; geochronology; isotope equilibria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GLG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GLG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 111 | Introduction to Physical Geography | Spatial and functional relationships among climates, landforms, soils, water, and plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | Credit is allowed for only GPH 111 or 411 |
| GPH | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GPH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 210 | Society and Environment | Examines the interaction among social processes, key environmental issues, and nature's role as a resource at global and regional scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 211 | Landform Processes | Laboratory science class on earth-surface processes, with exercises emphasizing how erosion, transportation, and deposition modifies landforms. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | SQ | |
| GPH | 212 | Introduction to Meteorology | Fundamentals of weather and climate, including basic atmospheric processes and elements. Students whose curricula require a lab course must also register for GPH 214. Both GPH 212 and 214 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SQ | |
| GPH | 213 | Introduction to Climatology | Fundamentals of meteorological/climatological analysis, including terminology and symbology. Recommended for meteorology/climatology program students. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | SG | |
| GPH | 214 | Introduction to Meteorology Laboratory | Introduces basic meteorological/climatological data and measurements. Suggested concurrent enrollment in GPH 212. Both GPH 212 and 214 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SQ | |
| GPH | 215 | Introduction to Climatology Laboratory | Fundamentals of meteorological/climatological map analysis and interpretation. Recommended for meteorology/climatology program students. May be taken concurrently with GPH 213. Both GPH 213 and GPH 215 must be taken to secure SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | SG | |
| GPH | 267 | Extreme Weather | Introductory survey of extreme weather and climate processes and the often disastrous consequences at the intersection of human operations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |

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| GPH | 275 | Geography of Cyberspace | Focuses on the relationship between geography and human's use of (and creation of) Internet and communications technologies to interact with each other over space and time. Studies the cyberspaces that they produce and their impacts on the information society. Topics include cyberpunk and space in popular culture; computer spaces, virtual worlds, and gaming; mapping cyberspace; bots, crawlers, and viruses; cyberspace law; cyberspace as social media; historical cyberspaces; the Digital Divide; geographies of e-commerce; mobile cyberspaces; cyber-place; and code/space. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 314 | Global Change | Response of Earth's natural systems (atmosphere, hydrosphere, lithosphere, biosphere) to past environmental change, and effects of potential future changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & G | Pre-requisite: Minimum 45 hours |
| GPH | 381 | Geography of Natural Resources | Nature and distribution of natural resources and the problems and principles associated with their use. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | |
| GPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 405 | Energy and Environment | Sources, regulatory and technical controls, distribution, and consequences of the supply and human use of energy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Minimum 75 hours; Credit is allowed for only GPH 405 or 505 |
| GPH | 409 | Synoptic Meteorology I | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: MAT 270 with C or better; Pre/Co-requisite: PHY 121 |
| GPH | 410 | Synoptic Meteorology II | Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: GPH 409 with C or better |
| GPH | 412 | Physical Meteorology | Physical processes in the earth-atmosphere system on regional and global scales; concepts and analysis of energy, momentum, and mass balances. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 111, MAT 270, PHY 121 and PHY 122 with C or better. Credit is allowed for only GPH 412 or GPH 591 (Physical Meteorology) |
| GPH | 413 | Meteorological Instruments and Measurement | Design and operation of ground-base and aerological weather measurement systems. Collection, reduction, storage, retrieval, and analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 213 with C or better |
| GPH | 414 | Climate Change | Surveys three climate research areas: paleoclimatology, theories (e.g., greenhouse warming), numerical modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Prerequisite(s): GPH 111 (or GPH 213 or 314) |
| GPH | 418 | Landforms of the Western United States | Studies landforms and geomorphic processes in the western United States, including lecture, topographical maps, aerial photographs, satellite imagery, and field trips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| GPH | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: BIO 181, GPH 111 or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| GPH | 433 | Alpine and Arctic Environments | Regional study of advantages and limitations of the natural environment upon present and future problems involving resource distribution, human activities, and regional and interregional adjustments. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | G | Credit is allowed for only GPH 433 or 598 (Alpine & Arctic Environments) |
| GPH | 474 | Dynamic Meteorology I | Large-scale atmospheric motion, kinematics, Newton's laws, wind equation, baroclinics, vorticity, and the midlatitude depression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 271, PHY 131, PHY 132 with C or better |
| GPH | 475 | Dynamic Meteorology II | Topics in climate dynamics. General circulation, numerical modeling, teleconnection phenomena, and surface-atmosphere interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite: GPH 474 with C or better |
| GPH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| GPH | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |

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| GPH | 491 | Geographic Field Methods | Field techniques, including use of aerial photos, large-scale maps, and fractional code system of mapping; urban and rural field analysis to be done off campus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| GPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| GPH | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| GPH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| GPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| GPH | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 511 | Fluvial Processes | Geographical aspects of processes of river erosion, transportation, sedimentation; emphasizing spatial characteristics of forces, resistance, landforms, sediment; includes computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP or GPH 535 |
| GPH | 569 | Digital Analysis of Remotely Sensed Data | Focuses on the digital image processing of remotely sensed data for earth resource analysis and applications. Provides the skills and knowledge to apply digital remote sensing techniques for biophysical and environmental planning and problems. Through laboratory work, students have opportunities to practice concepts and techniques learned in the lecture part. Requires a reasonable background in college algebra and basic statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GPH 394 (Digital Analysis of Remotely Sensed Data), 569 or 598 (Digital Analysis of Remotely Sensed Data) |
| GPH | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| GPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| GPH | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 596 | Advanced Spatial Statistics | Multivariate and advanced statistical techniques including Box-Jenkins modeling and spectral analysis. Requires project papers and presentations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GPH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GPH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 101 | Designing Life | Helps students develop strategies to successfully navigate their education experience. Focuses on critical and reflective thinking. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 111 | Graphic Design History I | Surveys development of visual communication from its origins to the 20th century. Investigates significant technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| GRA | 112 | Graphic Design History II | Surveys contemporary and 20th-century graphic design. Investigates relationships among graphic design and related disciplines, technological, industrial, and social influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 111 with C or better |
| GRA | 121 | Principles for Graphic Design I | Graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Graphic Design major. Corequisite(s): GRA 111 |
| GRA | 122 | Principles for Graphic Design II | Continued exploration of graphic design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): GRA 121 with C or better; Environmental Design or Graphic Design major. Corequisite(s): GRA 112 |
| GRA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 220 | Design Drawing I | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for graphic design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 122 with C or better; Passed Milestone; Co-requisites: GRA 221; GRA 222 |
| GRA | 221 | Letterform | Drawing of letterforms with focus on proportion and structure. Introduces letterform nomenclature and classifications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 222 |
| GRA | 222 | Visual Communication I | Theoretical and applied studies in shape, drawing, and color. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA122 with C or better; Passed Milestone; Co-requisite: GRA 220; GRA 221 |
| GRA | 223 | Typography | Theoretical exercises in spatial and textural qualities of type. Problems in tension, activation, and balance. Exercises in simple typographical applications. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 221 with C or better; Co-requisite: GRA 224 |
| GRA | 224 | Visual Communication II | Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 220 and GRA 222 with C or better; Co-requisite: GRA 223 |
| GRA | 225 | Communication/Interaction Design Theory | Theory related to the design of communication artifacts and interaction within various media environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 321 | Technology for Design I | Explores the process of technology in design. Projects interface with GRA 361. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design student; Co-requisite: GRA 361 |
| GRA | 322 | Technology for Design II | Emphasizes advanced technology in design problems. Projects interface with GRA 362. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 321 with C or better; Co-requisite: GRA 362 |
| GRA | 345 | Design Rhetoric | Develops critical thinking and expression of ideas in concise and persuasive written and spoken form. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Architecture, Digital Culture (Design), Design Studies, Environmental Design, Graphic Design, Industrial Design, Interior Design, Landscape Architecture major |
| GRA | 361 | Visual Communication III | Explores methodologies of strategic communication, development of visual systems, and information design ideation processes leading to applied projects in print and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 223 & 224 with C or better; Co-requisite: GRA 321 |
| GRA | 362 | Visual Communication IV | Comprehensive studio projects with emphasis on production processes leading to multidisciplinary applied projects in print, 3-D space, and digital media. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 361 with C or better; Co-requisite: GRA 322 |

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| GRA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 401 | Creative Environment | Explores and investigates theories of the psychology of space, psychology of people in space, and the psychology of objects as it pertains to creativity and the creative environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 421 | Exhibit Design | Familiarization with the processes associated with the design of exhibits, especially visual communication in 3-D. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 422; GRA 461 |
| GRA | 422 | Motion Graphics and Interaction Design | Discusses and explores theory related to the design of motion graphics and interaction through lectures and studio projects. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Graphic Design student; GRA 322 with C or better; Co-requisites: GRA 421; GRA 461 |
| GRA | 423 | Advanced Interaction Design | Advanced discussion and exploration of theory related to the design of interaction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 |
| GRA | 424 | Advanced Media | Advanced exploration of digital media for communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: GRA 422 with C or better |
| GRA | 440 | Finding Purpose | Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| GRA | 461 | Visual Communication V | Comprehensive studio projects with emphasis on design processes, including research, writing, critical thinking, practice, presentation, and analysis. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisites: GRA 421; GRA 422 |
| GRA | 462 | Visual Communication VI | Comprehensive studio projects pursued in cooperation with a public organization or private enterprise. All projects culminate in an exhibit. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Graphic Design student; GRA 461 with C or better; Co-requisites: GRA 423; GRA 424 |
| GRA | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| GRA | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| GRA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Graphic Design student; GRA 362 with C or better; Co-requisite: GRA 461 |
| GRA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| GRA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| GRA | 501 | Creative Environment and Collaborative Leadership | Explores and investigates creativity and group collaboration leadership as it applies to the creative process. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): graduate Herberger Institute for Design and the Arts major |
| GRA | 521 | Advanced Visual Communication Design Studio I | Students translate data, stories and references that they collect in their research into masterful visual narratives. This studio is an inquisitive environment for exploring ways to frame information and weave stories with graphic design. Students acquire new knowledge as individuals and as a group. Emphasizes studio-based research, conceptual development and articulation of process, voice and a high level of design execution. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Visual Communication Design major. Credit is allowed for only GRA 521 or GRA 590 (Advanced Visual Communication Design Studio I) |
| GRA | 522 | Advanced Visual Communication Design Studio II | Encourages students to develop a framework for understanding the role of design systems, tools and objects as cultural artifacts and their reflection on social diversity. In particular, students focus on the cultural experience of collaborative consumption as it is fostered through visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 521. Credit is allowed for only GRA 522 or GRA 590 (Advanced Visual Communication Design Studio II) |
| GRA | 526 | Visiting Designers | Series of workshops (three per semester) in which students work closely with professionals and scholars in design and related disciplines. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 561 | Methods in Visual Communication I | Introduces methodology in visual communication. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design or PhD in Environmental Design & Planning student |
| GRA | 562 | Methods in Visual Communication II | Advanced theories and methodologies in visual communication. Emphasizes visual search as the synthesis of theory and practice. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: DSC 561 with C or better |
| GRA | 563 | Thesis Document Design | Emphasizes the construction of the final thesis document as a visual communication object and/or medium. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |
| GRA | 581 | Internship in Teaching Design | Develop assignments, conduct critiques, structure dialogue, make presentations, and assist in the instruction of studio and lecture courses. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Master of Science in Design student |

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| GRA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 621 | Advanced Visual Communication Design Studio III | Structured around the Design School traveling-studio model, this studio challenges students to work together to identify new design opportunities. For approximately one week during the semester, students travel to an off-campus location to examine a local condition there for which new design solutions are needed. Students return to ASU and continue working on the project for the semester. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 522 |
| GRA | 622 | Advanced Visual Communication Design Studio IV | As a culmination of study at the master level, the student is responsible for the development of an individually determined, semester-long project in response to defined objectives, periodic commentary by committee, and formal review. Students meet regularly with a faculty member to discuss assignments. Final faculty review and project book containing a written as well as graphic theoretical component are the forms of final presentation for this contribution to the field of visual communication design. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): GRA 621 |
| GRA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| GRD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Graduate Education | Graduate Education | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | Z1 | Graduate Education | Graduate Education | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GRD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | GNA | Graduate Education | Graduate Education | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| GRK | 101 | Elementary Ancient Greek | Ancient Greek grammar and vocabulary with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| GRK | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| GRK | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |
| GRK | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| GRK | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 201 | Intermediate Ancient Greek | Continuation of GRK 101. Ancient Greek syntax and grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: GRK 101 with C or better |
| GRK | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| GRK | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| GRK | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 301 | Ancient Greek Literature I | Readings in ancient Greek prose; advanced grammar. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 201 with C or better |
| GRK | 302 | Ancient Greek Literature II | Continuation of GRK 301. Readings in ancient Greek poetry. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: GRK 301 with C or better |
| GRK | 344 | Classics and Comics | Explores the connections between the classical tradition of Ancient Greek and Roman literature and the modern American superhero comic book tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GRK 344 or LAT 344 or SLC 344 or GRK/LAT/SLC 394 (Classics and Comics) or SLC 494 (Classics and Comics) |
| GRK | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| GRK | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| GRK | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| GRK | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| GRK | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| GRK | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| GRK | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |

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| GTD | 501 | Global Technology and Development | Major theories of economic, political, and social development, with particular emphasis on the impact of current technologies and globalization. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 503 | Technology and the International Political System | Historical development of international political system, with emphasis on role of technology. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 504 | Technology and Development in Zones of Conflict | Examines the special context of technology and development in zones of conflict that face wars among other nations, civil strife and dramatic political change. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 505 | Research Design in Technology and Development | Emphasizes techniques of primary data collection, effective uses of secondary sources, for qualitative and quantitative applications. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 506 | Quantitative Analysis in Technology and Development | Uses correlation and regression-based multivariate statistical approaches in development studies. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 507 | Technology and Development in The Middle East | Examines historical and current patterns of political and socioeconomic development in the Middle East, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 507 or GTD 598 (Political Development in the Middle East) |
| GTD | 508 | Technology and Development in Latin America | Examines historical and current patterns of political and socioeconomic development in Latin America, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 508 or GTD 598 (Technology and Development in Latin America) |
| GTD | 509 | Technology and Development in North Africa | Examines historical and current patterns of political and socioeconomic development in North Africa, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 509 or GTD 598 (Technology and Development in North Africa) |
| GTD | 510 | Technology and Development in Sub-Saharan Africa | Examines historical and current patterns of political and socioeconomic development in Sub-Saharan Africa, including the role of technological development and current events. | N | LEC | N | GNA | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GTD 510 or GTD 598 (Technology and Development in Sub-Saharan Africa) |
| GTD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| GTD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 100 | Introduction to the Science of Health Care Delivery | Introduces the science of health care delivery in the United States. Presents basic concepts in health services, health care organizations, and the delivery of safe, accessible, high-quality health care. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | |
| HCD | 101 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| HCD | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School for the Science of Health Care Delivery | 1-3 | | |

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| HCD | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | PRA | N | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | CS | Prerequisite(s): completion of General Studies MA requirement with C or better; minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| HCD | 301 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 or MED 100. Credit is allowed for only HCD 301 or MED 450 |
| HCD | 302 | Health Care Management | Broad concepts and skills of management; application of these techniques to health care organizations. Students appreciate the variability of management styles and personalities and begin to develop their own style. Solidifies concepts through the use of case studies and asynchronous discussion boards. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: ECN 212; HCD 100 |
| HCD | 303 | Global Health Care Systems | Examines health care delivery systems internationally and explores contemporary issues affecting the institutions that provide health care and the people who seek health services. Covers the historical development of international health care systems, the organization and financing of systems of care, and the policy process and priority setting. Also covers current efforts at health care reform. Provides students with the necessary professional skills to be effective participants in efforts to evaluate and improve the delivery of health care nationally and internationally. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 100 or HCD 101 or MED 100 or PBH 100 |
| HCD | 305 | Public and Community Health | Provides a broad survey of national, state and local community health sciences and services including cultural and ethnic issues. Examines the concepts of health and wellness and introduces health education as a foundation for population-based health care. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 100 or HCD 101 or PBH 100 |
| HCD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 400 | Interpreting the Scientific Literature | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 100; HCD 300; MAT 210, 251, 265, or 270 |
| HCD | 402 | Health Economics | Emphasizes clinical relevance and application of searching and interpreting the literature, using case studies as examples. Applies these skills through in-class activities and through written report at the conclusion of the course. These tools ultimately assist the student with critical thinking and application of concepts to clinical scenarios. Class is held in a computer lab to facilitate class engagement. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 100 or MED 100; minimum 45 hours |
| HCD | 403 | Process Engineering | Core concepts in process engineering, specifically related to systems improvement and patient safety. The Institute of Medicine (IOM) advocates for integrating process engineering within health care to optimize health care outcomes. The IOM addresses multiple dimensions of health, including efficiency, effectiveness, safety, equity, patient-centeredness and access. These domains provide the framework from which faculty approach course content. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100 and 101; HSC 300 and 330 |
| HCD | 404 | Advanced Concepts in the Science of Health Care Delivery | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 301 and 402; HSC 330 |
| HCD | 405 | Health Technology | Develops essential skills in identifying, analyzing and evaluating information technology applications in health care. Examples include electronic health records, computerized prescriber order entry, and computerized clinical decision support. Discusses the use of health technology in a variety of care settings, including outpatient and inpatient, and facilitate access to health care in resource-poor communities through the use of efficient technology. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 100 or HCD 101 or MED 100; HCD 300 and HSC 330 |

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| HCD | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| HCD | 444 | Science of Health Care Delivery Internship | Applies the themes of science, systems and leadership across the continuum of health and health care. Application and discussion of core competencies to facilitate critical thinking. | N | RSC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 3 | | Pre-requisite: HCD 100, 101, 300, 301 and 400 |
| HCD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): minimum 2.00 GPA; senior standing |
| HCD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HCD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| HCD | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| HCD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| HCD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 501 | Health Behavior and Statistical Tools in Health Environments | Provides an understanding of the statistical tools and principles of research design and methods in health behavior research in health environments. Encompasses an overview of quantitative, qualitative and mixed designs and focuses on the interpretation and communication of health behavior research through published reports and presentations. Incorporates research approaches and methodologies utilized in an array of content areas. Helps students gain a strong conceptual understanding and application of the statistical tools and research methods used to answer research questions of interest to health and health behavior researchers; it does not focus on mathematical treatments of underlying assumptions and formulae and related statistical problems sets or exercises. | N | LEC | N | GNA | College of Health Solutions | School for the Science of Health Care Delivery | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 502 | Health Care Systems and Design | Introduces direct health care delivery structures and processes within and across health care settings, and their impact on the patient, family and community experience of the health care system and services. Examines the interaction among people, resources, delivery systems and built environments using perspectives, tools and strategies from multiple disciplines to evaluate strengths, gaps and opportunities for system improvements. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 510 | Interdisciplinary Approaches to Promotion of Healthy Lifestyles | Focuses on application of interventions to promote healthy lifestyles. Includes the theoretical and empirical foundations for clinical evidence for the implementation of healthy lifestyle interventions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 511 | Health Economics, Policy, and Payment Models | Economics provides a framework to understand and predict human decision making under scarcity, uncertainty and imperfect information. Examines concepts central to health care economics and their application to important decisions made by patients, families, practitioners, administrators and policy makers. Uses an individual family's scenario through a progressive case study to evaluate how incentives and information affect the health and health care of each family member. Each meeting integrates basic economic principles, existing facts and knowledge from economic research, and individual perspectives and experience regarding how these concepts apply to health care policy. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate. Credit is allowed for only BMD 511 or HCD 511 |

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| HCD | 520 | Interdisciplinary Perspectives on Health Disparities and System Access | Presents minority health and health disparities concepts and practices from an applied and action-oriented perspective for clinicians and administrators in order to transform systems of inequality and increase access and quality of care for ethnic minorities and other vulnerable populations. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 521 | Law and Health Promotion | Analyzes case studies which illustrate the impact of policy and law on health promotion strategies and health outcomes. Includes discussions of the theoretical foundations supporting legal, ethical and economic decision making related to health promotion and real-world examples of the impact of current policies. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 531 | The Health Care System | Health care delivery in the United States, including its composition, function and historical organization. The broad discipline of health services systems, health care organizations, and the delivery of safe, accessible, high-quality health care. Discusses the health care system from the perspective of various patient populations, including the aging patient population. Examines the influence of health care reform on health care delivery and costs. Solidifies concepts through the use of in-class case studies and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 532 | Health Care Management | Explores all aspects of managing health care organizations to provide high-value care (better outcomes at lower costs), including human resources, credentialing, finance, supply management, project management. In addition, students appreciate the variability of management styles and personalities and begin to develop their own styles. Solidifies concepts through the use of case studies from health care and other industries. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 540 | Seminar in Science of Health Care Delivery | Provides an introduction to the science of health care delivery, an exciting field that focuses on how to achieve the quality care that providers want to deliver and patients expect to receive. Too often quality care is compromised by inadequately designed systems of care. Provides an overview of the health care delivery system and then introduces the major components of the field. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 550 | Capstone: Applied Project | Discusses the results from student capstone projects, done in teams, and these projects related to broad topics explored during the prior coursework in the program. Capstone projects are identified early in the master's program in conjunction with and overseen by the degree leaders and the industry partners, and often a health care organization or health agency. These projects are worked on through the year with final written and verbal reports due in the last half of the semester. | Y | RSC | Y | GNA | College of Health Solutions | College of Health Solutions | 2 | | Prerequisite(s) with C or better: HCD 502, 540 |
| HCD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |

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| HCD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| HCD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | GRD | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-15 | | |
| HCD | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | |
| HCD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | |
| HCD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | College of Health Solutions | 1-15 | | |

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| HCI | 311 | Introduction to Health Care Innovation: Foundational Concepts | Organized around the Seven Pillars of Innovation: innovation process, leadership structure, outcomes, evidence-based practice, finance, policy, and technology and communication. Provides basic definitions and principles of innovation in addition to characteristics, skills and knowledge required for the innovator. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours |
| HCI | 313 | Philosophy of Science in Health Care: Understanding Paradigms of Health and Healing | Philosophy of science and its application to health and healing paradigms. Employs selected schools of thought and individual philosophers within philosophy of science to closely examine health and healing paradigms. Discusses concepts such as "life" and "death". Explores questions: What is science? What is health? Examines the way in which philosophy of science informs perceptions and definitions of health and healing in individuals and populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any PHI course with C or better; minimum 45 hours |
| HCI | 412 | Transforming Health Care: A Systems Perspective for Innovation | Basic elements of systems thinking as a framework for innovation in addressing current and future issues in health care. Focuses on what occurs at the intersection of disciplines as being fundamental to transforming health care. Stresses the importance of collaboration to the systems perspective, in addition to the value of individual worldviews. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 421 | Health Care Policy: The Innovator's View | Innovation perspective on policy decision making in the health care environment. This perspective views policy-making as a fluctuating, dynamic and evolving process as seen through a lens of innovation principles. Explores the relationship between politics and policy and discusses factors influencing policy development. Identifies methods to formulate and implement policy and presents models to evaluate, analyze and modify health care policy. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 425 | Facilitating Innovation to Achieve Outcomes | Principles of facilitation that promote and enable the implementation of innovation to achieve outcomes. This approach identifies facilitation as requiring input seeking, ongoing evaluation, and emergent correction of an existing plan of action. Discusses characteristics of effective teams, innovation leadership behaviors that impact change, and involvement of end-users. Compares and contrasts traditional project management processes with innovative facilitation techniques. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 428 | Technology: A Tool to Advance Innovation in Health Care | Analyzes the role of technology in achieving the Triple Aim: improved quality, improved patient experience, and decreased cost. Discovers tools that are defined as health information technology and those that support business services. Compares and contrasts tools of technology that hold the potential to advance innovation in health care. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 311 with C or better |
| HCI | 538 | Innovation and the Individual | Introduces the role of the innovator, including the essential behaviors of risk taking, managing workload, and addressing the challenges of innovation. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 540 | Understanding and Applying Principles of Evidence-Based Practice | Understanding how application of evidence-based practice principles assists healthcare professionals to provide the best care. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to the Masters of Healthcare Innovation |
| HCI | 542 | Systems Thinking in a Complex Environment | Examines basic and advanced systems principles as they relate to national and international health and healing systems. Specific emphasis is given to systems thinking from a complexity science perspective and the implications for innovation. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 543 | Approaches to Leading Health Care Innovation | Theory-based survey course introduces approaches to lead innovation in an organization. Many change initiatives are designed by those not completing the work, leaving workers isolated, restricted and powerless. Teaches health care leaders to value collaboration with and seeking input from those who will carry out the work. Analyzes approaches to planned change: positive deviance, appreciative inquiry and creation of a learning organization. Students construct a change plan using an appropriate approach to address a health care problem. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Innovation Leadership certificate program |
| HCI | 544 | IT for Healthcare Innovation | Focuses on the information technology (IT) trends and their strategic application in healthcare. Students develop an IT strategy that addresses a specific healthcare area of concern. Students gain an understanding of the role of IT in healthcare innovation and develop skills in business process improvement, change management, strategy definition, value proposition, responding to feedback and managing resistance. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |

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| HCI | 545 | Public Speaking for Innovation: Building Your Presence and Making the Case for Change | New ideas take a lot of explaining, and innovation often involves persuasion. Builds presence as a speaker and a leader--and gains expertise in public speaking for innovation. Public speaking for innovation is a combination of finding and building one's presence as a speaker and a leader--and translating that to an ability to explain and persuade, making the case for change. Students build their presence and gain the foundational knowledge necessary to successfully explain and persuade in innovation contexts. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Innovation Leadership certificate program |
| HCI | 546 | Communication, Technology, and Innovation | Overview of traditional, contemporary and innovative communication strategies in the 21st century. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Master of Healthcare Innovation major |
| HCI | 548 | Advanced Principles and Concepts of Innovation | Explores and analyzes the innovation in complex systems, focusing on developing specific skills for successful innovations. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 550 | Healthcare Policy and Innovation | Introduces the political, organizational, and economic dimensions of healthcare policy, emphasizing strategies for innovative policy and practice. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 552 | Financing for Innovation | Provides an overview of healthcare economics; develops budgeting, planning, and management skills; and culminates in financial analysis skills necessary to facilitate management decision making or writing business plans or grant proposals. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 554 | Outcomes Evaluation | Outcomes measurement, management, and evaluation for healthcare practitioners and/or leaders. May be repeated once for credit. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 561 | Innovation Methods | Capstone project to learn the active skills of healthcare innovation using an adapted IDEO model. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre-requisites: Admission to Master of Healthcare Innovation degree |
| HCI | 562 | Capstone Innovation Project II | Introduces the process of conceptualizing an innovation and building a plan or proposal to move forward with the innovation in either an entrepreneurial or intrapreneurial context. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 563 | Capstone: Final Innovation Project | Applies the concepts learned in MHI core courses and presents evidence of knowledge in innovation principles, applications and strategies for implementation and evaluation. Develops an innovation project in the form of a mindmap. Provides a comprehensive methodology for completing all aspects of an innovation opportunity. Student-directed demonstrations of the application of learned leadership skills and techniques for facilitating team and individual implementation. | N | SEM | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 570 | Innovation Proposal: Culminating Experience for Health Care Innovation Certificate | Applies concepts learned and operationalizes skills acquired throughout the Health Care Innovation certificate. Students envision emerging paths toward an outcome by first presenting a problem they have identified within a health care organization, and creating collaborative relationships and developing strategies to initiate change in their chosen setting. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 538; HCI 542; HCI 554; HCI 561 |
| HCI | 571 | Health Care Innovation Leadership Portfolio: Culminating Experience | Examines and applies personal leadership potential. Focuses on the effective development and facilitation of human networks to advance innovation in the health care space. Challenges students to appraise and analyze personal leadership strengths, challenges and opportunities. Explores strategies to evaluate students' current networks; develops the students' emergent professional networks. Gives focus to building relationships necessary to advance innovation in the health care space. Students develop and implement an action plan to advance their personal leadership growth and network utilization. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCI 538; HCI 543; HCI 545; NLM 562 |
| HCI | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 210 | Clinical Health Care Ethics | Healthcare ethics emphasizing analysis and ethical decision making at clinical and health policy levels for healthcare professionals. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisite: ENG 102,105 or 108 |
| HCR | 220 | Introduction to Nursing and Health Care Systems | Introduces the social, political, and economic contexts in which the nursing profession and health care systems in the United States evolved. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | H | |

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| HCR | 230 | Culture and Health | Cultures of diverse groups and health/illness. Cross-cultural communication, awareness of own cultural influences, indigenous and alternative healing practices. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | C & G | |
| HCR | 240 | Human Pathophysiology | Chemical, biologic, biochemical, and psychological processes used in study of structural and functional alterations in health with selected therapeutics. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s) with C or better: BIO 201 and 202; CHM 101 or higher; MIC 205 and 206 |
| HCR | 260 | Health Care Industry and Regulation | Overview of the complex system of regulations that frame the oversight and monitoring of the U.S. health care industry. Provides a foundational understanding of federal and state regulations as well as private health care regulatory agencies' requirements as they relate to physicians and other health care professionals, hospitals and other health care institutions, and insurance companies. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Health Care Compliance and Regulations BS major or minor |
| HCR | 262 | Health Care Licensure, Professional Development and Practice | Introduces interprofessional practice, professional licensure, education and training, certification and scope of practice within the health care industry. Explores compliance standards and accreditation as they relate to the authority and scope of licensure boards, which are designed to safeguard the public health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 261 |
| HCR | 263 | Introduction to Medical Billing and Compliance | Introduces the complex process of medical coding and billing practices and related federal regulations and programs. Provides learners with a fundamental understanding of medical coding and billing processes including terminology, stakeholders and regulatory impact. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 260 |
| HCR | 264 | Regulatory Essentials of Compliance Program Design I | Offers a comprehensive overview of the regulations that impact the health care delivery industry. These regulations include: protections against fraud and abuse, patient rights and privacy, protected health information (PHI) and electronic protected health information (ePHI), and occupational health and safety. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 261 |
| HCR | 265 | Regulatory Essentials of Compliance Program Design II | Comprehensive study of the creation, management and evaluation of all aspects of a formal health care compliance program. Learners investigate and discuss roles of the compliance officer and compliance committee, risk analysis, recommendations for and implementation of corrective action. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 264 |
| HCR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 301 | Research Methods for the Health Care Professional | Explores basic concepts of qualitative and quantitative research design utilizing methods of assessment, planning, implementation and evaluation. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): STP 226 or PSY 230 or SOC 390 or SWU 321 with C or better; TWC 347 or 362 with C or better |
| HCR | 302 | Social Determinants of Health | Addresses issues of social determinants and health disparities at the local, national and global levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): TWC 347 or 362; Corequisite(s): HCR 301 |
| HCR | 303 | Assessing Needs, Assets and Capacity for Health Education | Assesses needs, assets and capacity for health education at the individual, family and community levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): CDE 232 with C or better; HCR 210 and 230 with C or better |
| HCR | 330 | Fundamentals of Community Health | Provides a framework for understanding community health concepts. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): minimum 45 hours |
| HCR | 331 | Communication within Communities | Focuses on the integral nature of communication in health care, including the role communication plays in shaping individual, social and cultural beliefs and expectations about health. Provides skills for effective communication when working with individuals, groups and the media. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): minimum 45 hours |
| HCR | 335 | Program Development and Management for Community Health | Incorporates models, research and resource management to plan, strategize and evaluate community programs that promote healthy lifestyle choices in various, as well as specific, geographic communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): General Studies Literacy course; minimum 45 hours |
| HCR | 336 | Environmental Community Health | Examines the interdependent relationship between the health of the environment and the health of communities. Includes a focus on specific communities, as well as agencies and laws involved in the health of communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better |
| HCR | 340 | Foundations of Integrative Health | Discusses the similarities and differences of the biomedical and integrative health care systems providing an overview of integrative health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): ENG 102, 105, 108 or FYC MET |
| HCR | 341 | Biological, Manipulative, and Body-Based Therapies | Analyzes the principles and practices of select biological and body-based therapies and modalities and their use in the health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any BIO course; any CHM course |
| HCR | 342 | Mind-Body and Energy Therapies and Modalities | Analyzes the principles and practices of select mind-body and energy therapies and modalities and explains and distinguishes their use in the health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): any BIO course; any CHM course |
| HCR | 343 | Historical and Cultural Foundations of Integrative Health Care | Distinguishes commonalities and differences between early healing traditions and investigates the utility for today's health care system. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |

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| HCR | 350 | Introduction to Clinical Research | Provides an introduction to the biomedical and clinical research field and associated operational processes. Examines clinical trial development phases, regulatory protections for human subjects, clinical research team specializations, research organizations, good clinical practice, institutional review board functions, and research funding mechanisms. Explores specialized career positions for nursing and allied health professionals. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HCR 350 or 394 (Introduction to Clinical Research Management) |
| HCR | 360 | Data Security and Privacy in Health Care Compliance | Focuses on administrative practices that ensure the security of computerized systems and the protection of health information. Topics include communication and reporting, as well as specific regulations and authorities such as the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Breach rules, and HIPAA Security and Meaningful Use Attestation. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 260; HCR 261 |
| HCR | 362 | Monitoring and Auditing for Health Care Compliance | Ongoing health care compliance evaluation process critical to a successful compliance program. Provides the knowledge to utilize monitoring and auditing systems to ensure health care operations conform to established standards or comply with federal, state or local rules and regulations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 260; HCR 261 |
| HCR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |
| HCR | 400 | Evidence Based Practice for the Health Care Professional | Methods of clinical and scientific inquiry. Focuses on the application of an evidence-based practice approach. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 301; TWC 347 or TWC 362 |
| HCR | 402 | Advocacy for Health and Health Education | Discusses and analyzes existing or proposed policies on health and strategies for influencing the policy-making process. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 303 with C or better |
| HCR | 406 | Health Literacy for Health Care Professionals | Prepares students to use best practices for health communication that promote consumer health literacy. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 210 or HSC 320 with C or better; HCR 230 or HSC 210 with C or better; Pre or co requisite(s): HCR 301 with C or better |
| HCR | 430 | Foundation to Health Care Systems | Explores the impact of the current U.S. health care system on the health of individuals, families and communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better |
| HCR | 435 | Leaders in Community Health | Prepares students to assume a leadership role in health promotion in communities. Lecture. Prepares students to assume a leadership role in health promotion in communities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 330 with C or better; HCR 335with C or better; Pre- or co requisite(s): HCR 430 with C or better if completed |
| HCR | 439 | Community Health Seminar | Provides the opportunity to explore the health status of communities and to develop strategies for community health improvement. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s) with C or better: HCR 330, 331, 335, 336. Pre- or corequisite(s): HCR 430, 435 with C or better if completed |
| HCR | 440 | Interprofessional Approaches to Integrative Health Care | Prepares learners to develop and lead interprofessional teams with a focus on roles and responsibilities of integrative health care providers and practitioners. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |
| HCR | 441 | Legal and Ethical Issues Impacting Integrative Health Care | Examines current laws, government regulations, ethical principles and case studies to understand issues and consumers' use of integrative modalities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340 with C or better |
| HCR | 449 | Integrative Healthcare Capstone | Capstone course allows the student to demonstrate a culmination and synthesis of integrative health care body of knowledge by focusing on a single healing environment project. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 340; 341; 342; 343; 400; 440 with C or better. Pre- or corequisite(s): HCR 441; TWC 443 |
| HCR | 460 | Investigations and Disclosures in Health Care Compliance | Types of disclosures required by and investigations conducted by regulatory and accrediting agencies overseeing health care entities. Introduces oversight activities, enforcement and potential penalties incurred by health care entities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 362 |
| HCR | 461 | Corrective and Preventive Action Plans | Use of corrective and preventive actions (CAPA) in meeting the challenges of a compliant health care services operation. Covers design and implementation of CAPA to respond to deviations or errors in the health care environment. Identifies problems, implements corrective actions, evaluates consequences and employs preventive measures. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 362; HCR 460 |
| HCR | 462 | Specialty Topics in Health Care Compliance | Provides a comprehensive review of case studies and recent enforcement action involving litigation and enforcement of health care law, including review of landmark and contemporary cases brought by the United States Office of Inspector General, the Office of Civil Rights and state attorney generals. Applies knowledge and skills acquired from earlier coursework to real-world situations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): HCR 260; HCR 261 |
| HCR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| HCR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | |

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| HCR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| HCR | 545 | Foundations of Biospecimen Repository Administration | Examines the biospecimen repository industry from a business perspective. Students learn the scientific basis, collaborative nature, required personnel, timelines and processes that underlie the business environment of biospecimen repositories and their administration. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Biospecimen Repository Administration certificate program |
| HCR | 546 | Management of Biospecimen Repository Operations | Examines the biospecimen repository industry from an operational perspective. Students learn the process aspects of repository start-up through collection, maintenance and disbursement of specimens. Key elements include personnel training, planning, quality control, risk management, project management and safety implementation. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 547 | Biospecimen Resource and Technology Management | Examines the biospecimen repository industry from a technology and resource perspective. Students learn the planning and selection of technology and resources for the support of the start-up and long-term maintenance of a biospecimen repository. Key elements include technology and resources assessment and choice, cost-benefit analysis, initial budget, long-term and short-term planning. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 548 | Regulation and Ethics in Biospecimen Repository Administration | Examines the biospecimen repository industry from an ethical and regulatory perspective. Students learn the ethical and consenting challenges of biospecimen collection, storage and disbursement. Examines relevant historical case histories to inform current policies and practices. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 549 | Scientific Innovation and Biospecimen Repository Administration | Explores the driving effects of scientific innovation on biospecimen administration management. Students learn how scientific advancements increase the demand of high-quality biospecimens and high-quality data, referred to as next-generation biorepository research. Examines tracking pre-analytical variables, adequate preservation and storage methods, controlled biospecimen and data custodianship, governance with ethical and scientific oversight of operations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 545 |
| HCR | 551 | Clinical Research Monitoring | Introduces clinical trial monitoring processes and procedures. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing major |
| HCR | 552 | Medical Device Development and Regulation | Comprehensive examination of the regulatory framework for the design, development, approval/clearance and marketing of medical devices in the United States throughout the product lifecycle. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management or MS Regulatory Science and Health Safety major |
| HCR | 553 | Quality Assurance and Clinical Research | Explores basic quality assurance techniques, standards and applications in the clinical research arena. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Clinical Research Management major or certificate |
| HCR | 554 | International Regulatory Affairs | Principles of international regulatory affairs and requirements for marketing regulated products globally. Key regulations that relate to medical product safety, the origins of these regulations, and marketing applications in major foreign markets. Covers similarities and differences among global regulations and those in the United States. | N | LEL | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing Regulatory Science & Health Safety student |
| HCR | 555 | Pharmaceutical Safety and Risk Management | Comprehensive examination of regulatory, legal, and scientific factors in pharmacovigilance and risk management and risk mitigation. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 557 | Clinical Research Design and Methods | Explores basic clinical trial biostatistical methods in concert with clinical trial design and methods. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): MS Clinical Research Management, Nursing or Clinical Research Management (Grad Certificate) |
| HCR | 558 | Technical Writing for the Regulatory Professional | Focuses on teaching and applying writing and presentation skills critical for regulatory professionals | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 559 | Regulatory Science Internship | Internship in the field at a regulatory agency or in a regulated industry. Practicum. | N | PRA | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 560 | Regulatory Science Capstone | Culmination course integrating all components of regulatory core courses demonstrating knowledge and competency in the field of regulatory science. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | Pre-requisite: Regulatory Science and Health Safety Master of Science student |
| HCR | 561 | Responsible Conduct of Clinical Research | Introduces concepts and policies for the responsible conduct of research (RCOR), institutional review boards, and dissemination of findings. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 562 | Clinical Research Data Management and Technology Implementation | Orientation to database design and management, technology assessment methods, auditing procedures for continuous quality improvement (CQI), and cost-effectiveness analysis (CEA). | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HCR | 563 | Fundamentals of Regulatory Affairs | Principles of clinical research management and regulatory affairs. Overview of national/international regulatory systems and agencies, and trends in conducting clinical research. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 564 | Capstone Clinical Research Management Project | Culmination course integrating all components of CRM core courses demonstrating knowledge and competency in designing and managing clinical trials. Students must have documentation of unencumbered professional license in the state where the capstone project will be completed, if required. | N | REC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Master of Science or Clinical Research Management Certificate student |
| HCR | 565 | Clinical Research Operations | Development, implementation, and operations of FDA clinical research trials, including budgeting, contract negotiations, site evaluation, marketing, project management, and reporting. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 566 | Capstone Clinical Research Management Project II | Culmination course integrating CRM degree coursework by demonstrating knowledge and competency in clinical research management planning, operations, and implementation processes. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 567 | Research Management and Contemporary Research Topics | Management and leadership principles integrated with contemporary research topics will be introduced. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management Masters student or Nursing Graduate student |
| HCR | 568 | Healthcare Project Management | Designed for graduate students and managers who desire to improve their effectiveness as project managers in the healthcare context. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Clinical Research Management, Clinical Research Mgmt Cert, or Regulatory Science and Health Safety Master of Science student |
| HCR | 570 | Introduction to International Health Systems, Professions, and Research | Introduces systems of international healthcare delivery, professions that provide healthcare delivery, and international research principles and practices. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 571 | Cultural Diversity and Healthcare Delivery | In-depth exploration of culturally diverse aspects of population health, including culture-bound syndromes, folk practices, assessment approaches, and interactions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 572 | International Healthcare Delivery Capstone | Culminating course integrating all International Health requirements that produce culturally responsive implementation and evaluation plan for the student's clinical practice. A portion of the course will be held in Mexico. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HCR | 574 | The Institutional Review Board (IRB) and Human Research | Analyzes the value and functions of the Institutional Review Board (IRB), including the basis for the IRB's authority and the regulations that govern an IRB's activities. Topics include IRB operations and ethical issues. Explores the historical basis for regulating research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): HCR 561 |
| HCR | 575 | Contracting and Budgeting for Industry-Sponsored Clinical Trials | Examines best practices in contracting, negotiating and budgeting for industry-sponsored clinical trials. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Clinical Research Management MS major or certificate |
| HCR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 101 | ASU & Herberger Institute Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university and the Herberger Institute for Design and the Arts. Explains and defines success with integrity, ASU resources and involvement, the Importance of arts to society and the community, personality and learning style, and success in college and beyond. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Pre-requisites: Herberger Institute for Design and the Arts BA in the Arts or BA in Design Studies major; Credit is allowed for only HDA 101 or 194 (ASU Herberger Inst Experience) |
| HDA | 125 | Fashion Design I | Introduces designing a collection of marketable apparel for a targeted merchandise category. Includes instruction in using inspiration to synthesize garments in a collection, editing a collection for the most marketable ideas, sourcing, fabric selection, costing, and an introduction to pattern development and garment production. | N | LEL | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | |
| HDA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 210 | Creativity and Innovation in Design and the Arts | Designed to get students thinking in a focused manner about creative practice and process. Many young designers and artists arrive at higher education in their discipline having taught themselves or having received a piecemeal education in the directed application of ideas. Aids students in knowing why and how they are creative. Covers types of creativity, how inspiration happens, how to take a project from idea to reality, how to work creatively in teams and how to fuse creative ideas with an understanding of environment to help realize work in socially useful ways. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Credit is allowed for only HDA 210 or 294 (Creativity & Innovation for Design and the Arts) |
| HDA | 225 | Fashion Design II | Expands upon fashion design fundamentals learned earlier to encompass additional aspects of the fashion industry, which includes fashion as business, and as a sociological and cultural phenomenon. | N | LEL | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Prerequisite(s): HDA 125 with C or better |
| HDA | 252 | Foundations of Arts Entrepreneurship | Develops entrepreneurial knowledge and skills supporting the self-actualization, self-efficacy, and market acumen of artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Prerequisite(s): Herberger Institute student |

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| HDA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 310 | Socially Engaged Practice | Students gain a wide literacy in the community arts field through reading, discussion and technical practice. Examines theories and techniques of community-based project development. Pairs artists with communities to create art rooted in the needs, values, desires, triumphs and challenges of that community. Helps prepare the artist of the 21st century with skills to apply artistic practices in diverse contexts. | N | LEL | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 42 hours; Credit is allowed for only HDA 310 or 494 (Public Practice: Engagement & Community) |
| HDA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 397 | Capstone Development | Prepares students for a successful capstone project. Students develop a formal proposal and identify a mentor for the project. | N | LEL | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1 | | Prerequisite(s): The Arts BA major; minimum 56 hours |
| HDA | 410 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists--creative practitioners of all sorts--are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: HDA 310; Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |
| HDA | 420 | Design and the Arts Business Administration | Design and the arts business seminar course that covers core business principles for design or arts businesses such as human resources, legal issues, accounting and finance. Asks with each of these areas how these disciplines uniquely work within design or arts settings. Investigates global business topics and discusses why ethics is integral to every design or arts business enterprise. Provides a broad understanding of design or arts business activities and practices, allowing more effective participation in business discussions in the future. | N | LEC | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only HDA 420 or 494 (Design & the Arts Bus Admin) |
| HDA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | |
| HDA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | |
| HDA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-7 | | |
| HDA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-3 | | |
| HDA | 510 | Seminar in Socially Engaged Practice | Discussion-based seminar revolves around readings aimed at describing and understanding the nature of society, culture and the circulation of ideas. Investigates art as a way of knowing, as a profound humanitarian gesture, as a form of disciplined research, and a way of building community and confirming shared values. Explores specific strategies and approaches to socially engaged art practices through readings, visiting artist presentations and direct engagement with community-based projects. Illustrates and underscores how artists--creative practitioners of all sorts--are key to the giant collaborative projects we call culture, language and the entirety of cumulative artistic and scientific knowledge. Provides a solid bulwark for the recognition that we really are all in this together and are making it up as we go along. | N | SEM | N | GNA | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HDA 410, 494 (Seminar in Socially Engaged Practice), 510 or 598 (Seminar in Socially Engaged Practice) |
| HDA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HDA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HDA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | Dean, Herberger Institute for Design and the Arts | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 101 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| HEB | 102 | Elementary Modern Hebrew | Reading, writing, speaking, and understanding of basic modern Hebrew, with emphasis on pronunciation and grammar. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 101 with C or better |
| HEB | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| HEB | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| HEB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HEB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 201 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 102 with C or better |
| HEB | 202 | Intermediate Modern Hebrew | Intensive review of grammar, with emphasis on the development of the skills of speaking, listening comprehension, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Pre-requisites: HEB 201 with C or better |
| HEB | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| HEB | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| HEB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 313 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 with C or better |
| HEB | 314 | Advanced Modern Hebrew | Continues developing speaking, reading, and writing skills in Modern Hebrew, with a focus on different aspects of the Israeli culture studied in literature, cinema, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: HEB 202 |

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| HEB | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| HEB | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only HEB 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| HEB | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only HEB 348, 394 (Israeli Culture and Society), JST 348, REL 311, or SLC 348 |
| HEB | 375 | Contemporary Culture of Israel | Intense study of aspects of historical, social, political, and cultural modern life in Israel. Beginning of Zionism to present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| HEB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 411 | Judaism and the Beginnings of Christianity | Studies the beginnings of Christianity in relation to Judaism: their common context, the process of their distinction and their mutual influence. Through a historical and thematic approach, explores the parallel construction of Jewish and Christian identities. Combines readings from primary sources (Hellenistic Judaism, Qumran, New Testament, Early Christianity, Rabbinic Judaism) and up-to-date scholarly literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 or 108 or HST 100 or 102 or REL 100 or SLC 142 or 202 with C or better; Credit is allowed for only HEB/JST/REL 411 or HEB 394 (Judaism and the Origins of Christianity) or HEB 494 (Judeo-Hellenistic Literature) |
| HEB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HEB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| HEB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HEB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| HED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| HED | 510 | Introduction to Higher Education | Overview of American higher education, including philosophical, political, and social aspects. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 527 | Seminar: Student Affairs Administration | Organizational models, administrative competencies and skills, and emerging challenges of student affairs administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 573 | Applied Inquiry in Higher Education | Provides an overview of research, evaluation and assessment practices in higher education and strategies for utilizing these practices as professionals in higher education. Focuses on learning about and demystifying the process of scientific inquiry, with the intent of translating that knowledge to regular practice in a higher education professional career. It is not a highly technical methods course--no advanced knowledge of statistics or qualitative techniques is assumed--but instead gives practitioners a foundation in educational research design as well as the tools to be literate, thoughtful, critical and frequent consumers of research. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): MEd Higher and PostSecondary Education major. Credit is allowed for only HED 573 or HED 591 (Applied Inquiry) |
| HED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 620 | Diversity in Higher Education | Overview of the demographic profile of college students, faculty, and staff. Addresses issues of access, retention, and development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 634 | The American Community College | Philosophy, history, curriculum, faculty, students, organization, financing, research, policy and current issues. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 644 | Higher Education Finance and Budgeting | Financial planning and budgeting in higher education institutions. Issues related to financing public and private colleges and universities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 649 | Law of Higher Education | Analyzes legal issues related to higher education; examines key court decisions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 679 | The American College Student | Overview of American college student from demographic, background characteristics, and values/attitudes/perspectives. Includes access, persistence, and degree completion. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 688 | Organizational Theory | Major views of organizations and their influence on role definition and participant behaviors in educational organization. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 689 | Leadership in Higher Education | Theory and practice of leadership and administration in higher education institutions. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 701 | Higher Education Doctoral Proseminar | Students read and discuss recent writings on the sociology of higher education and explore research interests as well as identities as educational researchers. Visits to several types of higher education institutions in the state of Arizona to meet various program faculty who introduce their interests as researchers and practitioners. Learn better understanding of the challenges and promise of higher education as an academic field and of themselves as researchers and practitioners. Time also spent discussing the dissertation and the writing process. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Higher and Postsecondary Education Doctoral student |
| HED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| HHE | 510 | Design and Health | Introduces health design core concepts while focusing on evidence-based design research to demonstrate how healthcare environments impact well being. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 540 | Current Issues in Health Design | Explores and systematically investigates current issues in health that are driving the current and future directions of the healthcare industry, including the design of healthcare and healing environments. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate OR Senior with minimum 108 hours |
| HHE | 566 | The Healing Experience Research Lab | Connects spatial relationships and healthcare user needs through design, clinical delivery, and architecture. Applying research outcomes to the built environment. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Master of Science in Design or Master of Healthcare Innovation student; HHE 510 and HHE 540 with B or better OR Master of Architecture, Bldg Des(Energy Perform/Bldgs) MS, Master of Landscape Architecture, or Master of Urban Design |
| HHE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HHE | 591 | Seminar | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HHE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Herberger Institute of Design and the Arts Graduate student |
| HIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| HON | 171 | The Human Event | Landmarks in the social and intellectual development of the human race, with emphasis on critical thinking and argumentative writing. Enrollment restricted to Barrett students. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Prerequisite(s): Barrett Honors student; maximum 75 hours |
| HON | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors students; Maximum 60 earned hours |
| HON | 272 | The Human Event | Covers the Renaissance through the modern period. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | (L or HU) & H | Pre-requisite: HON 171 with C or better |
| HON | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Prerequisite(s): Barrett Honors student |
| HON | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 310 | Justice and Law | Philosophical study of theories of justice in relation to law and morality. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |
| HON | 366 | International France | Offered in France, course utilizes the "city as text" to analyze the construction of national identity. | N | PRA | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 370 | History of Ideas | Advanced and intensive survey of key social and intellectual currents in the development of humanity as reflected in both philosophical and creative works with an emphasis on critical thinking and discussion, as well as argumentative writing. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | L or HU | Prerequisite(s): Barrett Honors student. Credit is allowed for only HON 171, 272, 370 or 394 (History of Ideas) |
| HON | 378 | Culture and Society in England, Ireland, and Scotland | Chronologically explores texts, events, and sites for historical and cultural impact on development of England, Ireland, Scotland, and their countries' relationships with each other. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & H & G | Prerequisite(s): Barrett Honors student |
| HON | 379 | Romantics, Victorians, and Moderns | Examines the development and impact of various literatures, arts, and ideas in England, Ireland, and Scotland from the Romantic through the Modern period. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | HU & G | Prerequisite(s): Barrett Honors student |
| HON | 380 | Aesthetics and Society | Advanced, interdisciplinary seminar explores the unique roles of aesthetics in society through philosophy, cultural studies, art, music, literature, film, and/or other media forms, with themes such as the politics of beauty, art and emotion, or creative production and reception. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | HU | Prerequisite(s): Barrett Honors student; HON 171; HON 272 (or HON 273 or 274) or HON 370 or HON 394 (History of Ideas); Credit is allowed for only HON 380 or HON 394 (Aesthetics and Society) |
| HON | 381 | Science and Social Worlds | Advanced multidisciplinary seminar examining the historical, cultural and political roles of science in society, including the politics of scientific knowledge production, the ethics of new technologies, and philosophical approaches to the study of health and medicine. | N | SEM | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student; HON 171 and 272 (or HON 370 or 394: History of Ideas; Credit is allowed for only HON 381 or 394: Science and the Self) |
| HON | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisite: Barrett Honors student; Minimum 30 hours |
| HON | 410 | Philosophy, Politics, and Law | Topics in political and legal philosophy, including political authority, obligation and disobedience, the nature of crime and punishment. Required for Certificate in Philosophy, Politics, and Law. | N | SEM | N | OPT | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): Barrett Honors student |

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| HON | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | Barrett, The Honors College | Barrett, The Honors College | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR non-Business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| HON | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 0-12 | | Prerequisite(s): Barrett Honors student |
| HON | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-6 | L | Pre-requisite: Barrett Honors student; Minimum 75 hours |
| HON | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-4 | | Pre-requisites: Barrett Honors student; Minimum 45 hours |
| HON | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-6 | | Prerequisite(s): Barrett Honors student |
| HON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | Pre-requisite: Barrett Honors student |
| HON | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Barrett, The Honors College | Barrett, The Honors College | 1-7 | | |
| HON | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-3 | | Prerequisite(s): Barrett Honors student |
| HON | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Barrett, The Honors College | Barrett, The Honors College | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HPS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 311 | Origins, Evolution, and Creation | History of opposition to evolutionary thinking with special reference to American creationism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| HPS | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HPS | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MAT 119 or higher; Minimum 30 hours; Credit is allowed for only HPS or PHI 313 |
| HPS | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314 |
| HPS | 322 | History of Science | Development and application of scientific thinking from ancient times through the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 323 | History of Science | Development and application of scientific thinking from the 18th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H | |
| HPS | 325 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HPS | 330 | History of Biology: Conflicts and Controversies | Focuses on 19th and 20th centuries, considering biology as a discipline. Evolution, problems of heredity, development, and cell theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 316 or HPS 330 |
| HPS | 331 | History of Medicine | Scientific study of the human body, changing theories of disease, evolution of practical opinions on treatment, and the emerging institutionalization of medical practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | H | Credit is allowed for only BIO 318 or HPS 331 |
| HPS | 332 | The Darwinian Revolution | Origin, nature, and subsequent history of the ideas of Charles Darwin. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HPS | 336 | Exploration and Science | 500-year survey of exploration as a historical process and cultural activity of Western civilization, with emphasis on its links with modern science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SB & H | |
| HPS | 340 | Biology and Society | Explores interactions between biological sciences and society, e.g., biomedical, environmental, ethical, historical, legal, philosophical, political, and social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 188 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 311 or HPS 340 |
| HPS | 347 | Science and Social Change | Modern science and technology are rapidly and radically transforming our society in innumerable ways, from how we process food to altering the very core of what it means to be human. Explores historical, philosophical, sociological, ethical, economic and political topics and consequences of modern science in society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only BIO 347, BIO 394 (Science and Society) or HPS 347 |
| HPS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 410 | Biomedical Research Ethics | Considers issues related to values in science such as collaboration, finances, legal issues, media, mentoring, ownership of ideas, scientific integrity. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only for BIO 416 or HPS 410 |
| HPS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| HPS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HPS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| HPS | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| HPS | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, HPS, MBB, MIC, or PLB 496 |
| HPS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HPS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| HPS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| HPS | 511 | History of Science | Teaches crucial skills needed for graduate-level research in history of science, including (1) critical analysis of primary sources from different periods in the history of science and (2) critical analysis and familiarity with important trends in the secondary literature ("historiography of science"). | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 512 | Philosophy of Science | Serves as a graduate-level introduction to five central themes in philosophy of science, and as a means to begin to investigate new topics. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 516 | History of Biology | Covers themes such as the voyages of discovery, systematics, and classification; morphology and embryology; Darwin and evolutionary biology; the rise of genetics; molecular and organismal approaches of post-WWII biology; recent history of biology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 518, HPS or HST 516 |
| HPS | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HPS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HPS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 615 | Biology and Society Lab | This course brings together graduate students, postdocs, and faculty members in biology and society. Sessions include panel discussions of biology and society topics from multiple perspectives, student-led discussions of important literature, practice presentations of papers for national meetings, discussion of dissertation and thesis ideas, and other activities that help to forge an active intellectual lab group. | N | LAB | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 620 | Research Prospectus Writing | Workshop-style course where students develop and peer review graduate-level project prospectuses, such as those for NSF grant proposals, journal articles, theses, and dissertations. Appropriate for graduate students in Biology and Society, History and Philosophy of Science, the life sciences, and related programs. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: graduate student (degree seeking or nondegree seeking). Credit is allowed for only HPS 620 or BIO 620 |
| HPS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HPS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HRC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 200 | Introduction to Social and Cultural Analysis | Introduces social and cultural analysis. Focuses on key terms and analytical categories for interdisciplinary work in social and cultural analysis and related fields such as American studies, ethnic studies, women and gender studies and Latin American studies. Examines a range of forms of oppression and privilege from a social justice perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HRC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| HRC | 310 | Social and Cultural Studies: Method and Theory | Covers how scholars in social and cultural studies think, argue, research and write. Traces the changing definition of fields such as American studies, ethnic studies, and women and gender studies. Studies these fields in relationship to 20th-century social movements and related theoretical categories including Marxism, cultural studies and class; feminism, gender and sexuality; and post-Colonialism, race and ethnicity. Covers basic archival and ethnographic research techniques underlying interdisciplinary research methods in these fields. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: Minimum 36 hours |
| HRC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 480 | Capstone: Practices and Approaches | Examines theoretical, methodological and epistemological issues in American studies, women and gender studies, and ethnic studies. Studies a wide variety of interdisciplinary theories, methodologies and epistemologies from an intersectional analysis of race, class, gender and sexuality in national and transnational contexts. Places special emphasis on historical definitions and debates on the relationship among theory, activism and praxis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): AMS 201 or ETH 100 or HRC 200 or WST 100 |
| HRC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HRC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HRC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| HRC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HSC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| HSC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 210 | Cultural Aspects of Health | Examines how culture influences health, healthcare practices, barriers to health care, interactions with healthcare professionals, and health disparities in the U.S. Addresses the need for cultural competence among health practitioners. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | C | |
| HSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 300 | Complementary Health Care | Evaluates the major components of complementary and alternative healthcare models and evidenced-based recommendations related to complementary healthcare. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): minimum 56 hours |
| HSC | 304 | Health Communication | Focuses on communicating topics related to health through an examination of theoretical frameworks, communication techniques, and different technologies including ehealth and mhealth. Addresses communication through channels that promote the health of individuals and communities. Topics may include clinician to client communication, peer to peer communication, health literacy, health in the media, and effective public health communication. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only HSC 304 or HSC 394 (Health Communication) |
| HSC | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Co-requisite: One of the following: ECD/EED/SED/SPE 396/397/478/496, PPE 474/484 or TEL 484; Credit is allowed for only HSC or PPE 310 |
| HSC | 320 | Applied Medical/Healthcare Ethics | Integrates the theory and practice of ethics within health-related disciplines and the application of bioethics by health science professionals, including health disparities. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | HU | Prerequisite(s): PHI 101 (or PHI 103, 306 or 314) OR Medical Studies major with PSY 101 (or SOC 101) |
| HSC | 330 | Health Care Systems in the U.S. | Presents and integrates the organization, financing, and delivery of health services in the United States from the professional, organizational, community, and systems perspectives. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCD 101 or HCR 210 or HSC 320 or MED 100 or PBH 100 |

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| HSC | 332 | Health Care Legislation | Provides an overview of the federal/state health policy legislative process, how it is implemented in institutions, and its effect on health science professionals and delivery of services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 210 or HSC 320; HCR 220 or HSC 330; Credit is allowed for only HSC 332 or HSC 494 (Health Care Legislation) |
| HSC | 340 | Changing Health Behaviors | Comprehensive review of the theoretical bases of health behavior change. Students gain the knowledge to identify behaviors associated with optimal health and wellness and to develop theory-based intervention strategies and techniques to effectively influence behavior change. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 230 or HSC 210; PSY 101 (or PGS 101); Credit is allowed for only HSC 340 or HSC 394 (Changing Health Behaviors) |
| HSC | 355 | Eating for Lifelong Health | Examines dietary choices throughout the life span and how they impact personal health and wellness. Prepares health and wellness team members to evaluate consumer and professional materials on dietary choices. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): NTR 100 or NTR 241 |
| HSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 400 | Practicum in Health Sciences | Supervised experience in area of student specialization. Students are placed with an agency, organization, business, and/or facility that meets their specific academic goals. | N | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Health Sciences Senior student |
| HSC | 401 | Professions and Practices in the Health Sciences | Provides the opportunity to explore career options within the health sciences, compare credentialing/licensure requirements across the U.S., describe professional organizations and societies related to the health sciences, evaluate employment trends in the health sciences, and interview professionals currently active in a health sciences-related field. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: HSC 320 |
| HSC | 410 | Supporting the Health of Older Adults | Focuses on community and national policies and programs that affect the health of older adults, programs to improve access to healthcare as well as to improve overall health, issues related to family and professional caregiving, and future challenges related to caring for older adults. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 230 or HSC 210 or Medical Studies major; Credit is allowed for only HSC 410 or HSC 394 (Supt Health Older Adult) |
| HSC | 412 | Health Issues in Later Life | Focuses on health issues that primarily affect adults ages 50 years and over as related to nutrition, physical activity, environmental toxins. Focuses on exploring those factors known to promote healthy aging. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 230 or HSC 210; Credit is allowed for only HSC 394 (Health Issues in Later Life) or HSC 412 |
| HSC | 420 | Evaluation of Health Sciences Research | Investigates methods of inquiry in health sciences and techniques for critiquing and interpreting research within the context of evidence-based practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): POS 401 (or PSY 230 or 231 or SOC 390 or STP 226 or 231 or 420) OR Medical Studies major with HCD 300 (or HSC 320) |
| HSC | 432 | Legal Issues in Health Care | Legal doctrines provide protection of consumers, health care providers, and health care institutions with regard to health care delivery including access and cost. Provides an overview of the legal obligation and rights of private and public stakeholders in the delivery and receipt of health care services. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 220 or HSC 330 or HSC 332 |
| HSC | 435 | Environmental Health Issues in the U.S. | Environmental health designed to address public health issues. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): HCR 230 or HSC 210; Credit is allowed for only HSC 394 (Envnmtal Hlth Iss in U.S.) or HSC 435 |
| HSC | 440 | Health Coaching Concepts and Skills | Health coaching techniques and skills for health promotion professionals with emphasis on the practical application of brief intervention and motivational interviewing skills to promote healthy lifestyle changes. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: HSC 210; PGS 101; Credit is allowed for only HSC 440, 498 (Health Coaching Concepts Skill) or NTR 530 |
| HSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | YGB | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): minimum 3.00 GPA |
| HSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| HSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| HSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | |
| HSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |

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| HSD | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 501 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 501 or POS 571 |
| HSD | 502 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): HSD 501 or POS 571 with B or better; Credit is allowed for only HSD 502 or POS 572 |
| HSD | 503 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only PAF 550 or HSD 503 or POS 573 |
| HSD | 504 | Analysis of Large-Scale Socio-Technological Systems | Provide skills and methods to analyze the design and management of large-scale socio-technological systems and the societal impacts of large-scale technological systems change. Emphasizes assessing the intertwining of lives and livelihoods in large-scale technological systems and the risks and vulnerabilities associated with large-scale systems failures, including the effects of both technological failures and natural hazards. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 505 | Science and Technology Policy Workshop | Provides the capstone experience for the Professional Science Master's in Science and Technology Policy. Builds on theoretical and analytical work carried out in the program's required courses, providing an integrative experience that requires students to synthesize knowledge gained in prior coursework and apply it to real-world policy problems and settings. By blending exposure to national science and technology policy officials and nationally recognized academic experts, the workshop both advances student learning beyond that possible in the classroom while encouraging students to expand their abilities to connect theoretical and practical insights. At the same time, the workshop provides a natural transition from the student's formal classroom learning to their required applied policy internships, which commences upon the end of the workshop. | N | SEM | N | YGB | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 515 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| HSD | 517 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HSD | 540 | Responsible Innovation and Research | Movements throughout Europe and increasingly the U.S. are beginning to consolidate the recognition of the profound effects that research outcomes have upon the world under the idea of responsible innovation and research. The responsible innovation and research pushes beyond the responsibilities of the individual researchers and addresses larger issues such as research agenda setting, management of large-scale research and innovation enterprises, funding priorities and innovation as a national policy priority. Explores the idea of innovation as a national policy; the practical and theoretical underpinnings of responsibility in the research world; the history, current state and future trajectories of responsible research and innovation. Focuses on the current literature in the field. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | |
| HSD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 601 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 601 or POS 671 |
| HSD | 602 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. Continuation of HSD 601. | N | SEM | N | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only HSD 602 or POS 672 |
| HSD | 610 | Colloquium | Regular meeting for the entire HSDST community. Includes outside speakers, student and faculty member presentations, and community discussions. | N | SEM | Y | OPT | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HSD | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | GRD | Future of Innovation in Society | School for the Future of Innovation in Society | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Future of Innovation in Society | School for the Future of Innovation in Society | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSD | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Future of Innovation in Society | School for the Future of Innovation in Society | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 220 | Health Care Organizations | Overview of United States healthcare delivery systems; financing, health policy, basic principles of budgeting, cost-benefit analysis, and resource management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | H | |
| HSM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| HSM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HSM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| HSM | 502 | Health Care Organization | Concepts, structures, functions, and values that characterize contemporary healthcare systems in the United States. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 505 | Managerial Epidemiology I | Basic constructs and measures of epidemiology. Epidemiologic study designs. Potential impact of chance, bias, confounding, on an epidemiologic study. Causal criteria; levels of evidence in epidemiological studies, implications and limitations of statistical association. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 561 or ECN 501 with C or better. |
| HSM | 512 | Healthcare Economics | Economics of production and distribution of healthcare services, with special emphasis on the impact of regulation, competition, and economic incentives. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 522 | Health Sector Information Management | Information technology and knowledge management applications in the health sector, including care delivery and financing institutions and in the pharmaceutical and biotechnology industries. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 542 | Healthcare Law | Legal aspects of healthcare delivery for hospital and health services administration. Legal responsibilities of the hospital administrator and staff. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 561 | Biostatistics | Aspects of descriptive statistics and statistical inference most relevant to health issues, including data, rates, and confidence intervals. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 564 | Health Care Finance | Overview of the acquisition, allocation, and management of financial resources by healthcare providers. Focuses on economic, financial, and accounting principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 565 | Introduction to Health Policy | Current policy issues in health through concepts of access, cost, and quality; issues relating to disease trends and policy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 589 | Healthcare Strategic Management | Capstone assessment of current policies, problems, and controversies across the broad spectrum of health services administration. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Economics | 3 | | Pre-requisites: HSM 502 with C or better |
| HSM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HSM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | |
| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | |
| HST | 100 | Global History to 1500 | Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian sub-continent and imperial China, to 1500. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 101 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 102 | Western Civilization: Ancient and Medieval Europe | Origins and development of Western societies and institutions from the ancient world through the Middle Ages. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 103 | Western Civilization: Renaissance to Enlightenment | Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 104 | Western Civilization: French Revolution to European Union | Traces origin and development of Western societies and institutions from the French Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G & H | |
| HST | 106 | Asian Civilizations | Civilizations of China, Japan, and India from antiquity to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | |
| HST | 107 | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| HST | 107 | Asian Civilizations | Civilizations of China, Japan, India, and Southeast Asia from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 108 | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | |
| HST | 108 | Introduction to Japan | Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | |
| HST | 109 | United States to 1865 | Growth of the Republic from colonial times through the Civil War period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |

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| HST | 110 | United States Since 1865 | Growth of the Republic from the Civil War to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST or REL 111 |
| HST | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HST, POS 112 or HST 194 (Foundations of Democracy) |
| HST | 113 | United States and Arizona Social Studies | Introduction to the United States and Arizona from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only GCU 113, HST 113, or GCU 194, US & AZ for Aspiring Elmy Ed |
| HST | 114 | World Social Studies | Introduction to the world from the integrated social science perspectives of history, geography, and government. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Credit is allowed for only GCU or HST 114 |
| HST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| HST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HST | 200 | Historical Themes | General introduction to selected themes in history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 201 | Historical Themes in Asia | General introduction to selected themes in Asian history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 203 | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 203 | Historical Themes in Latin America | General introduction to selected themes in Latin American history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 204 | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | |
| HST | 204 | Historical Themes in the US | General introduction to selected themes in United States history. May be repeated for credit when topics vary. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 210 | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | |
| HST | 210 | American Social History | American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | |
| HST | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |
| HST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| HST | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| HST | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| HST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| HST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU or SB) & H | Pre-requisites: History, history minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisites: History, history minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|----------------------------------------------------|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 300 | Historical Inquiry | Introduces the methodological and theoretical tools of history as a scholarly discipline for History majors. Course is organized thematically. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Prerequisites: History, History minor or Secondary Education - History, students; Minimum 45 earned hours; ENG 102, 105 or 108 with C or better. |
| HST | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301 |
| HST | 302 | Studies in History | Specialized topics in history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 303 | Studies in Asian History | Specialized topics in Asian history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 304 | Studies in European History | Specialized topics in European history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 304 or JST 304 |
| HST | 305 | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 305 | Studies in Latin American History | Specialized topics in Latin American history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 306 | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 306 | Studies in United States History | Specialized topics in United States history. Explores regions, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 307 | Studies in African History | Specialized topics in African history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 308 | History and Philosophy of Sustainability | Examines sustainability issues in a broadly interdisciplinary way, but with a special emphasis on humanities perspectives, focusing on human ideas, values and institutions as they have evolved over time. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours; Credit is allowed for only HST 308 or PHI 322 or SOS 309 or BIO/HST/PHI/SOS 394 (History & Philosophy of Sustainability) |
| HST | 309 | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 309 | Exploration and Empire | Surveys European discovery, exploration, and imperialism in the early modern and modern periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 310 | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 310 | Film as History | In-depth study of moving image media as recorder, object, and writer of history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 312 | History of Women in Science and Medicine | In-depth inquiry into the history of gender issues in Western science and medicine from Greco-Roman antiquity through the beginning of the 21st century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | Pre-requisite: ENG 102, 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only HPS or HST 312 |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 313 | American Cultural History to 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the nation's colonial and early national periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 320 or HST 313 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 314 | American Cultural History Since 1865 | Culture, including ideas, ideals, the arts, and social and economic standards, from the age of industrialism to modern U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours. Credit is allowed for only AMS 321 or HST 314 |
| HST | 315 | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 315 | Political History of the U. S. | American political history since independence, focusing post-1865. Evaluates major trends in issues, presidential leadership, elections, and state politics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 316 | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 316 | 20th-Century U.S. Foreign Relations | U.S. relations with foreign powers from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|----------------------------------------------------|-------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| HST | 318 | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |
| HST | 318 | History of Engineering | The history of engineering from the earliest record to modern times, examining the social, cultural, and economic effects on society. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & G | Pre-requisite: ENG 102, 105, 108 or ENG 112 with C or better; Minimum 45 hours |
| HST | 320 | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 320 | U.S. Urban History since 1850 | History of the city in American life from the mid-19th century to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 321 | Constitutional History/US to 1865 | Origin and development of the American constitutional system from colonial period through the Civil War. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 322 | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | |
| HST | 322 | Constitutional History of the United States Since 1865 | Development of the U.S. constitutional system from Reconstruction to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | |
| HST | 323 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and African Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| HST | 325 | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 325 | Immigration and Ethnicity in the United States | Origins, historical development, and future of a multiethnic society, 1492 to 2050. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 326 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | 326 | The Global History of the Trans-Atlantic Slave Trade | Reading- and writing-intensive course that employs critical thought to look at the origins, development, abolition, and impact of Atlantic slave trade as a global economic enterprise and great human tragedy; slavery experience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or HST 109 or minimum 45 hours; Credit is allowed for only AFR 305 (or AFH 305) or HST 326 |
| HST | 327 | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 327 | Women in U.S. History, 1600 to 1880 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 328 | Women in U.S. History, 1880-1980 | Historical discussion of American women of diverse racial, religious, and ethnic groups and classes; focuses on changing definitions of women's roles. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 329 | Women in 20th-Century U.S. West | Nuanced exploration of how women of various cultures have contended for and shaped the U.S. West, including the West of imagination. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | H & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| HST | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| HST | 333 | African American History to 1865 | In-depth examination of African Americans' roles in American history, thought, and culture from slavery to 1865. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 363 (or AFS 363) or HST 333 |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|----------------------------------------------------|-------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| HST | 334 | African American History Since 1865 | In-depth examination of African Americans' role in American history, thought, and culture from 1865 to present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours; Credit is allowed for only AFR 364 (or AFS 364) or HST 334 |
| HST | 335 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| HST | 337 | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 337 | American Indian History to 1900 | Cultural, economic, political, and social continuity and change of American Indian communities to 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 338 | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 338 | American Indian History since 1900 | Cultural, economic, political, and social continuity and change of American Indian communities from 1900 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 340 | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 340 | American Military History | Studies the role of the military in American life during war and peace from colonial times to the present day. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 341 | U.S. West 19th Century | Social, political, and economic development of the trans-Mississippi West, beginning with the Louisiana Purchase and ending in 1900. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 341 or HIS 320 |
| HST | 342 | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 342 | U.S. West 20th Century | Role of the western states in U.S. history since 1890 emphasizing politics, the environment, industry and labor, and ethnic minorities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 343 | American Southwest | Development of the region from 1848 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 343 | American Southwest | Development of the region from 1848 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 344 | Arizona | Emergence of the state from early times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 344 | Arizona | Emergence of the state from early times to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 345 | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |
| HST | 345 | Environmental History | Examines the interaction between humans and the natural world in the United States from the late 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105, 108 or 112 with C or better |
| HST | 346 | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 346 | Ancient Greece II: Late Classical and Hellenistic Period | Trace transformation of the Greek world between the end of the Peloponnesian War (404 B.C.) and the absorption of the last major Greek state by growing power of Rome (30 B.C.), with special attention to how Greeks in this period lived and thought and how the period's political and economic changes helped to create new forms of culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 347 | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 347 | Ancient Greece I: Bronze Age through the Peloponnesian War | Traces Greek History from its prehistoric beginnings through the Peloponnesian War (431-404 B.C.), with a special focus on the Archaic (ca. 800-480 B.C.) and Early Classical periods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 348 | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 348 | Rome | History and civilization of Rome from the beginning of the Republic to the end of the Empire. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 349 | Early Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 5th through 10th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 350 | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 350 | Later Middle Ages | Political, socioeconomic, and cultural developments of Western Europe from the 11th through 15th centuries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 351 | Renaissance Europe | Culture of the Renaissance in Italy and Northern Europe from the 14th to the early 16th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 352 | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 352 | Europe's Reformations | Causes and implications of the major Protestant, Catholic, and Radical religious reformations in 16th- and 17th-century Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | |
| HST | 353 | Old Regime in Europe | Society and culture of Europe during the 17th and 18th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 354 | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 354 | Revolutionary Europe | Political, social, economic, and intellectual currents in Europe from the French through the Russian Revolutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 355 | Total War and the Crisis of Modernity | Forces of change and instability in early 20th-century Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 356 | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 356 | Europe since 1945 | Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 357 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | 357 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| HST | 358 | Jewish History from Antiquity to 1492 | Continuity and change in political, legal, economic and sociocultural history of the Jews from ancient through medieval times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 359 | Jewish History from 1492 to 1948 | Jewish history from early modern through modern times, highlighting emancipation, enlightenment, and Jewish responses to modernity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 360 | The Crusades: Religion & Conflict in the Middle Ages | Examines the origins, the development, and the outcomes of the movement that we call "crusades" by connecting the military aspect of the crusades to broader developments. Focuses primarily, but not exclusively, on the period 1095-1453. Geographically covers chiefly the Mediterranean, and, to a lesser extent, northeastern Europe. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with a C or better and minimum 30 hours; Credit is allowed for only HST 360 or 394 (Crusades in the Middle Ages) |
| HST | 361 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | 361 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| HST | 362 | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 362 | Sex and Society in Classical and Medieval Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and religious change in classical and medieval Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 363 | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 363 | Sex and Society in Early Modern Europe | Family life, sex roles, and marriage and their relationship to political, economic, and religious change in early modern Europe. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

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| HST | 364 | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 364 | Sex and Society in Modern Europe | Family life, sex roles, and marriage, and their relationship to political, economic, and social changes in modern Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 365 | World Wars I and II: Europe's Eastern Front | In-depth study of the history of the Eastern Front in Europe in the two world wars. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 365 or 394 (WWI and WWII Eastern Front) |
| HST | 366 | England to 1689 | In-depth examination of the political, economic, and social development of the English people to the late 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 367 | Modern Britain | In-depth examination of the political, economic, and social development in Britain from 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 368 | Culture and Imagination in European History | Topics in European cultural and intellectual history. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 368 | Culture and Imagination in European History | Topics in European cultural and intellectual history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 369 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| HST | 370 | Eastern Europe in Transition | Democratization, privatization, and identity transformations since the fall of communism in contemporary Eastern Europe and the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 371 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 371 or REL 377 |
| HST | 372 | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | 372 | Modern Middle East | In-depth examination of the effect of the West and modernization on Middle Eastern governments, religion, and society in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: Minimum 24 hours |
| HST | 373 | Roman History I: Foundations and Republic | Traces the growth of Roman power from Rome's humble beginnings in the eighth century B.C. to its domination of the Mediterranean and the transformation of the Roman Republic into the Roman Empire after the Battle of Actium (31 B.C.). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 374 | Roman History II: The Roman Empire | The Roman Empire from the reign of the first emperor, Augustus (27 B.C.-A.D. 14), to that of Justinian (A.D. 527-565), focusing on the lives of the Roman emperors, the society and culture of the empire, and the profound changes that eventually contributed to the empire's collapse. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours |
| HST | 375 | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 375 | Colonial Latin America | Ancient civilization, exploration and conquerors, and colonial institutions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 376 | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 376 | Modern Latin America | In-depth examination of the development of independent Latin American republics since 1821. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 378 | Latin American Women: The National Period | In-depth study of the history of women, gender relations, and state policies in a broad continental setting, from independence to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 383 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| HST | 384 | China | Political, economic, social, and cultural history of the Chinese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 385 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| HST | 386 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| HST | 387 | Japan | Political, economic, social, and cultural history of the Japanese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |

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| HST | 388 | Japan | Political, economic, social, and cultural history of the Japanese people from the 17th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 389 | Japan Society and Values/Premod | Effects of economic and social transitions on personal and social values as reflected in the dramatizations of contemporary events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 30 hours |
| HST | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| HST | 391 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |
| HST | 392 | Modern India | In-depth study of modern India and its neighboring countries from the 18th century to the present. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 392 or HST 303 (Modern South Asia) or HST 394 (Modern South Asia) |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours |
| HST | 397 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| HST | 400 | Topics in American Historical Periods | Focuses on specific periods in American history. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 404 | Conquest and Encounters in Colonial Latin America | How did Hernan Cortés and Francisco Pizarro defeat the Aztec and Inca Empires? Despite numeric inferiority, limited provisions, and little knowledge about the Americas, Cortés and Pizarro defeated advanced civilizations that had experienced warriors and millions of inhabitants. Possible explanations include the conquistador's valor, advanced weaponry, superior military strategy, Indian allies, and biological attacks. In their encounters with native peoples of the Americas, Europeans were not always conquerors. Álvaro Núñez Cabeza de Vaca and Lope de Aguirre failed both in their attempt to conquer a large Indian civilization and in their effort to find mineral wealth. A few Europeans such as Bartolomé de Las Casas spoke out against the abuses committed against the Indians during the conquest. Explores these issues from the perspective of both Europeans and native peoples and looks at the long-term impact for Latin America and its peoples. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 404 or HST 494 (Conquest & Encounters) |
| HST | 405 | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 405 | Colonial American History to 1763 | Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 406 | American Revolution/1763-1789 | Causes, course, and consequences of the American Revolution culminating in the ratification of the Constitution. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 407 | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 407 | Early U.S. Republic/1789-1850 | Political, social, economic, and cultural development of the United States from the Revolution to 1850. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

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| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 408 | Civil War and Reconstruction | Explores the causes, conduct, and consequences of the American Civil War, concentrating on the years 1848 to 1877. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 409 | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 409 | Emergence Modern U.S. 1877-1918 | Triumph of modern political, social, and economic structures and values, 1877-1918; role of region, religion, race, and ethnicity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 410 | Modern U.S., 1918 to 1945 | 1920s boom and the crash, the Depression and the New Deal response. The Second World War at home and abroad. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 411 | Postwar U.S., 1945-1973 | Cold War, prosperity, reform, and immense social and political change in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 412 | Contemporary U.S., 1973- Present | End of the Cold War, political crises, and cultural transformations in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 413 | Contemporary America | The United States from 1945 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| HST | 415 | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 415 | Unequal Sisters: Women and Political and Cultural Change | Examines race, ethnic, and class differences among women, focusing on the political and cultural experiences of women in the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & H & C | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 416 | Western Rivers | Examines the relation between rivers, culture, and environment in the American West. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L & H | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 418 | The Hispanic Southwest | Development of the Southwest in the Spanish and Mexican periods to 1848. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| HST | 419 | 20th Century Chicano/a History | Historical development of the Chicano community in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| HST | 423 | The Tudor Monarchy | Political, cultural, and social foundations of 16th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 424 | The Stuart Monarchy | Political, social, economic, and cultural developments in 17th-century England. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 426 | The British Empire | British imperialism and colonialism in Africa, the Americas, Asia, and the South Pacific. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 427 | French Revolution/Napoleonic Era | Conditions in Pre-Revolutionary and Revolutionary France; organization of France under Napoleon and impact of French changes upon Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 428 | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 428 | Modern France | Social, political, economic, and cultural transformations of French society, 1815-present. Impact of industrialization, war, and revolution on people's lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 429 | Modern Germany | Germany since 1871. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 429 | Modern Germany | Germany since 1871. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 430 | The Ottoman Empire in the Classical Period | Focuses on the largest and most powerful Islamic polity from the late Middle Ages until the early twentieth century: its formation, institutions, social and cultural life, and its multifaceted impact on Europe and the Near East. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 430 or HST 495 (The Ottoman Empire in the Classical Period) or HST 498 (The Ottoman Empire in the Classical Period) |
| HST | 431 | Eastern Europe and the Balkans, Pre-1914 | Empire and nation in Eastern Europe and the Balkans before World War I, emphasizing Hapsburg and Ottoman lands. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 432 | Eastern Europe the Balkans, 20th Century | Politics and culture in Eastern Europe and the Balkans from World War I to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 435 | The Russian Empire | Development of Russian imperial institutions and civil society from the 17th to the early 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 436 | The Soviet Experiment | In-depth study of Communist revolutionaries' rule of Russia, focusing on utopian culture, Stalinist terror, heroism in war, and the breakup of the former Soviet Union. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 438 | Modern Spain | Cultural, economic, political, and social development of modern Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 441 | Latin America and the World Economy | Globalization did not begin in the late twentieth century, but rather global trade has linked Latin America with the rest of the world for over five hundred years. The region has been an active and important participant in the world economy since Columbus's first voyage in 1492. This course explores the social, cultural, economic, and environmental impact of such participation on both Latin America and the rest of the world. It is organized both chronologically and thematically. We will study both colonial and post-colonial trade. The commodities studied include sugar, rubber, bananas, and cocaine. | N | LEC | N | OPT | New Interdis Arts & Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 441 or HST 305 (Latin America and the World Economy) or HST 494 (Latin America and the World Economy) |
| HST | 443 | The United States and Latin America | Latin American struggle for diplomatic recognition, attempts at political union, participation in international organizations since 1810, and relations between the United States and Latin America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 444 | Latin American Independence | History of independence movements throughout the Western hemisphere from the late 18th century until the mid-19th century. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, 108 or 112 with C or better; Minimum 55 hours |
| HST | 445 | 20th-Century Cuba | History of Cuba from colonial era to formation of the early republic; political, economic, social development in late 20th century. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 447 | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | 447 | Modern Mexico | In-depth examination of political, economic, social, and cultural developments in Mexico from 1810 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 55 hours. Credit is allowed for only HIS 423 or HST 447 |
| HST | 448 | Mexican/U.S. Border | Analyzes the evolution of the Mexican/U.S. border region from the mid-19th century to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 449 | Mexican Immigration to the U.S. | Assesses the evolution of immigration and emigration public policy since the mid-19th century. Seeks to contextualize the relationship between immigration and other elemental nation-state issues as the economy, education, identity, and civil rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & H & C | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 450 | Postmodern Mexico | Challenges historical myths about the evolution of the nation state and calls into question that globalization and transnationalism are only recent phenomena of the postmodern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| HST | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| HST | 453 | The People's Republic of China | Analyzes major political, social, economic, and intellectual trends in China since the founding of the People's Republic in 1949. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 454 | History of Genocide | Examines the individuals and institutions responsible for the most infamous episodes of state-sanctioned violence in the 20th century. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G & H | Prerequisite(s): minimum 45 hours. Credit is allowed for only FOR 454 or HST 45 |
| HST | 456 | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 456 | The Vietnam War | Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 459 | Gandhi and the Politics of Nonviolence | In-depth study of Gandhi and the Gandhian political philosophy and practice of nonviolence. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 55 hours. Credit is allowed for only HST 459 or HST 498, Gandhi: Politics of Non-Violence |
| HST | 465 | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 465 | Women in Europe, 1750 to Present | European women's diverse religious, ethnic, national, and economic roles in society, culture, and politics, 1750 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU or SB) & H | Pre-requisite: ENG 102, 105, 108 with C or better; Minimum 55 hours |
| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |

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| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; ENG 102, 105, 108 with a C or better; Minimum 55 hours; Credit is allowed for only HST 480 or HST 530 |
| HST | 480 | Methods of Teaching History: Classroom Resources | Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program. Credit is allowed for only HST 480 or HST 530 |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 481 | Methods of Teaching History: Community Resources | Identify community-based resources for teaching history, work with resources, and learn how to integrate them into the secondary classroom. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program; HST 480 with C or better |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| HST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Pre-requisites: Barrett Honors student; HST 300 (HIS 300) or 495 with C or better |
| HST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 55 hours |
| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): History or Secondary Education (History) student; ENG 102, 105, or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 300 or HST 495 or JST 490 |
| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Prerequisite(s): History or Secondary Education (History) student; ENG 102, 105, or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 300 or HST 495 or JST 490 |
| HST | 495 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L | Prerequisite(s): History or Secondary Education (History) student; ENG 102, 105, or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 300 or HST 495 or JST 490 |
| HST | 496 | South, Southeast, and East Asia in the Global Matrix | In this capstone seminar, majors in Asia Studies take up broad comparative themes, integrating knowledge from the major's three tracks (East, South, and Southeast Asia) and executing a research project culminating in a major paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s) with C or better: ASB 240 (or GCU 240 or HST 111 or 240 or 245 or POS 240 or REL 240 or 245 or SGS 240 or 245); ENG 102 (or ENG 105, or 108); minimum 55 hours |
| HST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |

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| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: HST 200 or 300 (HIS 300) with C or better; History major with senior standing or Education-History student with minimum 75 hours |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| HST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| HST | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 502 | Public History Methodology | Introduces historical research methodologies, techniques, and strategies used by public historians. Readings, short papers, and guest speakers. Required for students in the public history concentration. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 515 | Studies in Historiography | Methods and theories of writers of history. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 520 | Masters of Nonfiction | Students read and critically discuss works by well-known nonfiction writers to improve their own writing skills. Consists of weekly writing exercises, reviewed with workshop-style discussions centered on individual authors, themes or genres such as history, journalism, personal essays, biography, character profiles, travelogues, book reviews and op/ed commentary. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only HPS or HST 520 |
| HST | 525 | Historical Resource Management | Identification, documentation, and interpretation of historic period buildings, sites, and districts. Emphasizes interdisciplinary efforts among historians, architects, and anthropologists. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 527 | Historical Administration | Preparation of historians in administration of archives and historical sites, museums, societies, and offices in government agencies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 532 | Community History | Techniques and methods of community history emphasizing local resources. Required for community history option. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: History MA or PHD student |
| HST | 573 | Museum Administration | Formal organization and management of museums, governance, personnel matters, fund raising and grantsmanship, legal and ethical issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 573 or HST 573 |
| HST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| HST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |

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| HST | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: History MA or PHD student |
| HST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Pre-requisite: History MA or PHD student |
| HST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | Pre-requisite: History MA or PHD student |
| HUD | 301 | Housing and Community Design and Development | Single- and multifamily housing, residential neighborhoods, and planned communities. Affordability in owner-occupied and rental housing. First-time, move-up, and adult markets. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 302 | Housing Production Process | Development feasibility analysis, finance, contracts, land acquisition, community and permit presentation and negotiation, scheduling, cost control, marketing, and sales. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 361 | Housing and Urban Development Studio I: Residential Design and Development | Affordable residential design, development, and production process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; Passed Milestone; Co-requisites: HUD 301; HUD 363 |
| HUD | 362 | Housing and Urban Development Studio II: Community Design and Development | Neighborhood and new community design and development process. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 361 with C or better; Co-requisite: HUD 302; HUD 364; HUD 403 |
| HUD | 363 | Housing and Urban Development Seminar I: Residential Design and Development | Affordable residential design, development, and production process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 301; HUD 361 |
| HUD | 364 | Housing and Urban Development Seminar II: Community Design and Development | Neighborhood and new community design and development process. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 302; HUD 362; HUD 403 |
| HUD | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 401 | Assisted Housing | Publicly subsidized and nonprofit housing. Policy, implementation, and administration. FHA, Section 8, FmHA, projects and scatter site, and tax considerations. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 402 | Community Revitalization: Problems and Strategies | Public policy and strategies for neighborhood revitalization and community renewal. Preservation and adaptive reuse, gentrification, neighborhood safety, and related socioeconomic concerns. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 403 | Advanced Topics in Housing and Urban Development | Varying topics, such as manufactured housing, homelessness, mortgage and finance in housing, housing abroad, marketing housing, and sustainable community development. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| HUD | 461 | Housing and Urban Development Studio III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction, cost management, and marketing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 362 with C or better; Co-requisites: HUD 401; HUD 463 |
| HUD | 462 | Housing and Urban Development Studio IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Housing & Community Development student; HUD 461 with C or better; Co-requisites: HUD 402; HUD 464 |
| HUD | 463 | Housing/Urban Dev Seminar III | Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction and cost management, and marketing. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; HUD 302 and HUD 364 with C or better; Co-requisites: HUD 401; HUD 461 |
| HUD | 464 | Housing and Urban Development Seminar IV: Neighborhood Revitalization Process | Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Housing & Community Development student; Co-requisites: HUD 402; HUD 462 |
| HUD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Housing & Urban Development BSD student |

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| HUD | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| HUD | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| HUD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| HUD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| HUM | 530 | Pop Culture America | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Division of Humanities | 3 | | |
| HUM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| HUM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| HUM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IAP | 101 | Art, Artist, and Culture | Provides an approach to art, creativity, and culture in global, historical, and contemporary contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 102 | Foundations I: Performance Techniques and Composition | Focuses on practice-based studies of contemporary presentational strategies and techniques. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 103 | Foundations I: Interdisciplinary Digital Media | Digital media studies and application of contemporary artists, processes, and presentation practices in interdisciplinary arts. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 104 | Foundations I: Fundamentals of Sound Art | Investigates late 20th- and 21st-century sound art and our relationship with it. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 105 | Foundations I: Fundamentals of Visual Art | Focuses on contemporary aesthetic concepts and language for interdisciplinary visual arts application. Introduces core concepts of visual design: the elements and principles of design and the creative process, the basics of drawing, color theory, typography and 2D design. Engages student in the fundamental aspects of design to build an adequate foundation and prepares for the next level of the study of interdisciplinary arts practice. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 201 | Introduction to Interdisciplinary Arts | Considers interdisciplinarity in practical terms in all art forms. Also considers antecedents and cross-cultural issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |

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| IAP | 202 | Perspectives on Interdisciplinary Arts and Performance | Social, cultural, and historical examination of interdisciplinary art and performance and a survey of current interdisciplinary work and approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 301 | Energetic Systems of Art: Collaboration in the Arts | Identifies and explores the energetic systems at work in the creation, performance, and perception of art. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 302 | Cross-Cultural Perspectives on the Arts | Social and cultural perspectives of art and performance through a survey of historical and contemporary attitudes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 304 | Traditions of the Avant-Garde and Experimental Art | Surveys 20th-century art movements and isms, including futurism, dada, surrealism, constructivism, realism, the Bauhaus, abstract expressionism, minimalism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 305 | 20th and 21st Century Art, Performance, and Media | Surveys artists, movements, and trends in the arts with an emphasis on interdisciplinary performance, media, and technology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 307 | Art and War | Global interdisciplinary survey of the range of work created by artists in response to war, through time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 310 | Women in Art | Cultural, historical, and social issues relating to the seeming scarcity of women artists and changing social contexts for women artists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre/Co-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAP or IAS 310 |
| IAP | 321 | Music Composition I | Study and implementation of specific compositional theories and procedures. May be repeated for credit when topics vary. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 322 | Multitrack Digital Recording | Introduces students to theory and practice of Musical Instrument Digital Interface (MIDI) technology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 324 | The Voice and Performance | Involves all aspects of the human voice, including research, creation, and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 325 | Sound Performance: Exploring Alternative Performance Groups | Utilizes innovative sound ensembles to explore all aspects of sound and its place in various art forms. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Pre/Co-requisite: IAP 201 or 202 |
| IAP | 331 | Performance, Acting, and the Individual | Explores the concepts of the self, the subject, and the author as each pertains to the solo artist. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 45 hours |
| IAP | 332 | Technical Production for Interdisciplinary Arts | Develops basic technical knowledge and application of fundamental stagecraft techniques used in the creation and presentation of performance works. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 333 | Directing for Performance | Explores various strategies for performance. Emphasizes nontraditional staging and performance. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 334 | Conceptual Development in the Arts | Conceptual development processes in the arts from initial idea to formal project proposals, grants, and production plans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 or IAP 202 |
| IAP | 352 | Seeing and Drawing | Develops drawing and seeing skills that are important not only to visual arts but also to music, dance, and theatre. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 354 | Visual Representation | Explores materials, processes, and aesthetic concepts of art making through various media with readings on cultural perspectives and contemporary theory. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: BA Digital Culture major or BA Interdisciplinary Arts and Performance major; Co-requisite: IAP 201 or 202 |
| IAP | 355 | Illusion and Vision | Inquiry into 2-D surfaces for visual representation and personal expression; includes readings on color theory, visual perception, and historical/cultural patterns. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 361 | Digital Editing and Media Literacy | Investigates the approaches used in digital editing with a focus on interactivity, graphics, audio, and desktop video. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or BA Digital Culture student |
| IAP | 362 | Games & Narratology | Focuses on design techniques for the writing of nonlinear and interactive stories in the video game development process. Compares and contrasts game writing with other creative writing such as short story, song writing, oral history, poetry, fiction and film. Examines, deconstructs and questions the game design approach commonly referred to as narratology. Inspects key texts in media and cultural studies for attitudes, ideas and thoughts on games and narrative in games. Uses materials, processes, and aesthetic concepts of level design and visual skills needed to create a video game using a game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 101 and 102 with C or better; IAP 105 with C or better |
| IAP | 363 | Sound, Image, and Media | Interdisciplinary arts projects for experimental approaches to relating sound and visual image, accompanied by survey of historical and contemporary material. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 364 | Documentaries | Media arts projects exploring new and experimental forms of visualization based upon an interdisciplinary survey of historical and contemporary examples. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

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| IAP | 365 | Digital Interactivity | Combines graphics, video, and animation with digital authoring tools for creation of interactive multimedia Web sites. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 368 | Digital Graphic Technologies | Employs technology used in contemporary graphic designs to design concepts and techniques for modeling and representation applications. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing or Digital Culture student |
| IAP | 371 | Verbal Art | Examines varieties of verbal art in everyday life, literature, oral and literate cultures. Considers diverse cultural forms and values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 375 | Contemporary Performance: Theories and Practice | Performance course focusing on elements of contemporary and digital performance in relationship to stage, new technologies, video, installations, and public art. Through interdisciplinary strategies, students gain tools to deepen their knowledge and range of performance. Requires students to engage in research, conceptualization, and the creation of new original work, combining classroom workshops, various readings, fieldwork, and production to emphasize interdisciplinarity, collaboration, and personal vision. Once theories and concepts are explored, students work in a conceptually based and physically rigorous environment toward producing new work, culminating in a final performance project. | N | STO | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): BA Digital Culture major or BA Interdisciplinary Arts and Performance major or BA Performance and Movement major. Corequisite(s): IAP 201 or 202 |
| IAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| IAP | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| IAP | 421 | Composition: Process, Technique, and Style II | Advanced study of specific compositional theories and procedures; in-depth analysis of individual work. | N | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 431 | Perspectives on Performance and Acting | Focuses on the interaction of the performer with media, alternative stagings, and collaboration with other performers. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 433 | Directing Workshop | Applies experimental directorial techniques to presentations and deconstruction of classical works including European and cross-cultural traditions. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only IAP 433 or MAS 598 (Directing Workshop) |
| IAP | 434 | Production Laboratory | Develops original scripts into showcase productions. Students function as theatrical ensemble, participate in all phases of performance and production values. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 441 | Movement for Performance | Explores the relationship of movement as it relates to performance, both historically and cross-culturally. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 462 | Games and Play | Focuses on a study of play and game design. Discusses what play is and why humans need it as it pertains to game design. Considers and analyzes an examination of the dark side of play. Scrutinizes the concept of what critical play is and how games are working within social, political and cultural systems. Studies these concepts as the students design and execute a serious or artistic game demo using the materials, processes, aesthetic concepts of art making and scripting skills needed to create a video game using a 3D game engine. Knowledge of introductory computer science recommended. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: IAP 105 with C or better |
| IAP | 464 | Media and Diversity | Interdisciplinary art projects exploring identity, perception, and technologies from a basis of class, race, ethnicity, gender, sexuality, and ecology. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | |
| IAP | 465 | Media Technologies and the Arts | Practical explorations of media arts interrelated with cultures, society, and technology, addressed through readings, discussion, research, and student arts projects. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 466 | Digital Interactivity, Advanced | Advanced multimedia authoring skills for creation of interactive works in DVD, CD ROM, and other media formats. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 467 | Acoustic Ecology | Investigations into the relationship between audio art and ecology; covers field recording, oral histories, digital editing, and designing audio Web site and databases. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAP | 468 | Digital Graphic Applications | Targeting, planning, design, authoring, development, and presentation of professional digital media graphics for Internet and print. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Interdisciplinary Arts and Performance or Applied Computing students |
| IAP | 469 | Advanced Audio Production | Engages advanced media students in the technical, logistical, and aesthetic concerns specific to audio in all forms of digital media. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IAP | 471 | Language, Culture, and Performance | In-depth examination of language in myth, poetry, social and aesthetic performance genres. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 473 | Aesthetic Research | Investigates how artists, in all disciplines and from different historical periods, conduct or participate in research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 474 | Art and Film | Focuses on film as an art form in relation to the arts through aesthetics, cinematic theory, period study. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| IAP | 480 | Senior Project | Capstone course. Students develop an exit project for the IAP degree under the guidance of an advisor. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3-6 | | |
| IAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAP | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IAS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 210 | From Passion to Practice: Charting Your Path | Part self discovery, part professional boot camp, this highly interactive course allows students to explore their strengths and passions and utilize them most effectively in their careers. Drawing upon the expertise of successful leaders, organizations and guest speakers from diverse professions, students learn skills and methodology that prepare them for entry into a fulfilling profession. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only IAS 210 or IAS 294 (Passion to Practice: Charting Your Path) |
| IAS | 220 | Psychology, Multicultural Narratives, and Religion | Examines contemporary narratives and theories that explore diversity in America and the authors' constructions of psychological identity and religious | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 225 | Building a Better You | Equips students to manage their lives effectively and integrate beliefs, values and skills into fulfilling careers. Students develop a focused career path based upon their learning profile, interests and self-knowledge. Develops critical thinking and reading skills needed for effective decision making and communication. Uses the Let Me Learn Advanced Learning System® to enhance self-awareness and growth. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 300 | Adult Career Development | Analysis of sociological and economic factors of 21st-century work environments, integrated with a psychological understanding of adult development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or SB | Pre-requisites: ENG 101 or 105 with C of better or Applied Science student |
| IAS | 305 | Work and Identity | Explores the relationship between work and identity, as well as the search for meaning in work across generations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | |
| IAS | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| IAS | 340 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-reqs for IAS 340. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |

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| IAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 410, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |
| IAS | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |
| IAS | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| IAS | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| IAS | 410 | Evolution of Ideas | Investigates ideas (paradigms) and revolutions (paradigm shifts). Examines several topics from perspectives of science, arts, humanities, social sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better |
| IAS | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |
| IAS | 415 | Life in the Universe | Examines the search for life in extreme environments on Earth and in remote locations beyond Earth. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 416 | Black Holes and Beyond | Explores developments in understanding nature's most basic force-gravity-from Aristotelian concepts to modern theories of curved space-time. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| IAS | 420 | Multicultural Autobiographies | Examines the human experience via autobiographies and personal narratives. Multicultural, literary, and psychological perspectives on individual lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C | Pre-requisites: ENG 200 with C or better and one 200-level literature course with C or better OR New College undergraduate student and minimum 45 credits; Credit is allowed for only ENG or IAS 420 |
| IAS | 430 | Science and Religion | Examines evolving relationships between scientific thought and Western and Eastern religious thought. Explores cosmologies, worldviews, and epistemologies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisite: ENG 101 or 105 with C or better; Credit is allowed for only IAS 430 or MAS 510 |
| IAS | 477 | World Literature | Introduces world literature, mostly outside the United States and England. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): ENG 200 with C or better; one 200-level literature course with C or better, or Letters and Sciences or New College undergraduate student with minimum 45 earned hours; Credit is allowed for only ENG 477 or IAS 477 |
| IAS | 480 | Capstone: Practices and Approaches | Individualized projects developed by the student under the guidance of the capstone coordinator based upon the student's area of concentration. Provides an opportunity to apply the knowledge and skills developed in the course of their program to real-world situations. | N | RSC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): Interdisciplinary Arts and Sciences BA or Philosophy, Religion, and Society BA or Applied Science BAS major |
| IAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| IAS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| IAS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| IAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| IAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| IAS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| IBC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 602 | Healthcare Statistics | Provides an overview of contemporary issues in health statistics and develops student proficiency in completing hands-on statistical analyses using Microsoft Excel. Develops proficiency in using Excel to manage data analyses as an ongoing tool to collect and analyze clinical and cost-effectiveness data in primary care and related healthcare settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 604 | Clinical Medicine/Pathophysiology | Overview of each of the main systems within the human body. Addresses the major diseases (symptoms, diagnosis, and medical treatments) within each system. Students learn appropriate medical terminology for symptoms, diseases, treatments, and medical tests so they can communicate effectively with medical practitioners (nurses and physicians). Content is equivalent to pathophysiology training in an RN program. Also addresses the role of behavioral care providers in medical settings; design and implementation of psychoeducational programs in primary care; stress management techniques for use in medical settings; chronic pain management; identification and treatment of somatization disorder; increasing compliance in noncompliant patients; alternative/complementary medicine; overview of nutrition; and the effects of exercise and nutrition on prevention and treatment of diseases. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 608 | Psychopharmacology for the Behavioral Care Provider | Provides overview of psychopharmacology to equip the behavioral care provider with the understanding of psychotropic medications necessary to make prescription recommendations to primary care physicians and to participate in medication management for patients being prescribed psychotropics. Basic principles of pharmacology in general, including pharmacokinetics, pharmacodynamics, medication development and the FDA approval process, interaction effects, drug company marketing strategies, appropriate and inappropriate medication usage, over-medication, and off-label medication use. Pharmacokinetics and pharmacodynamics in special populations (children, the elderly, and patients with co-morbid medical and psychological conditions). The Biodyne protocol for medication management, with emphasis on determining which psychological disorders are likely to be medication responsive. Major classifications of psychotropic medications: stimulants, antidepressants, anxiolytics, antipsychotics, mood stabilizers, narcotics. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 609 | Clinical Neuropathophysiology | Presents overview of each of the basic neuroanatomy, neurophysiology, and a focus on the manifestations of neurophysiological dysfunction across the life span for Doctor of Behavioral Health (DBH) program behavioral clinicians. Covers the basic human brain anatomy, neurophysiological processes, development, and maturation. Using case studies, presents and discusses evidence-based support for theories of psychiatric disorders and neuropsychopathology. Incorporates evidence-based research findings on the role of genetics, neurophysiological adaptation, epidemiological and societal influences in order to develop understanding of disruptions in normal neurophysiological functioning. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 610 | Behavioral and Psychological Assessment in Primary Care | Presents a comprehensive model of behavioral and psychological assessment for behavioral health clinicians in primary care and related medical settings. Provides behavioral health consultants with the necessary knowledge base and skills to develop an appropriate assessment and treatment plan for a variety of commonly seen complaints in primary care. Places attention on the assessment of both psychiatric and behavioral complaints across the lifespan. Students become familiar with both structured interview and empirically support quantitative measures consistently utilized to enhance our understanding of the presenting complaint. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 612 | Introduction to Behavioral Interventions | Provides a foundational understanding of behavioral health interventions for primary care settings for those students intending to work in administrative, management or allied health positions. Provides a theoretical basis for various psychological schools of thought, as well as an overview of the empirical evidence for those approaches. Reviews models of therapy including: psychodynamic, brief strategic, cognitive-behavioral and solution-focused. Also reviews two intervention strategies typically used in integrated settings: Acceptance and Commitment Therapy (ACT) and Motivational Interviewing (MI). Explores the ways that these approaches serve as the theoretical framework of the Biodyne model. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 612 or IBC 780 (Introduction to Behavior Intervention) |
| IBC | 613 | Cognitive/Affective Bases of Health | Provides an overview of cognitive and affective theories and their intersection with health and health behavior change among individuals and communities. Covers topics including (but not limited to): Health Belief Model, self-efficacy, attribution theory, social-cognitive theory, and the transtheoretical model of change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 615 | Innovative Technologies in Behavioral Health | Provides a quick overview and answers to basic questions related to both online therapy and telemental health. Gives a downloadable audio recording (MP3) and access to the accompanying video clips that augment a rich sampling of pages extracted from our other coursework. As a composite, this experience introduces our multi-modal learning environment and, more importantly, gives an idea of the issues involved with establishing an online or otherwise remote practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 616 or IBC 780 (Innovative Technologies in Behav. Health Intervention) |
| IBC | 620 | Psychosomatic Illness: Diagnosis & Treatment | Teaches how to successfully diagnose and treat physical illness caused by various forms of psychosocial stress (psychophysiologic disorders, PPD). Because patients are often unaware of the nature or degree of stresses that are responsible for their illness, places emphasis on learning how to detect and use clues that patients provide to develop a more complete understanding of the struggles than they are able to perceive for themselves. Focuses on selecting, assessing and treating a patient known to the student who has medically unexplained physical symptoms. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 620 or IBC 780 (Psychosomatic Illness: Diagnosis and Treatment) |
| IBC | 624 | Integrated Behavioral Health Care for Children and Adolescents | Integrates developmental psychology with pediatric psychology in order to prepare behavioral clinicians to provide screening, assessment, and intervention for children and adolescents in primary care and other medical settings. Presents an overview of developmental stages with an emphasis on critical tasks, while contrasting normal versus abnormal development. Develops societal, familial, and cultural influences. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 634 | Strategies and Techniques for Behavior Change in Primary Care | Examines and discusses the theoretical and applied health-related research changing nutrition, smoking and physical activity behaviors in clinical practice. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 660 | Healthcare Legal, Ethical, and Professional Issues | Integrate three key areas of healthcare ethics, law, and professional issues for the Doctor of Behavioral Health (DBH) clinician in primary care: (1) the code of ethics for psychologists; (2) legal and ethical issues in medicine; and (3) technological issues and the behavioral health provider. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 670 | Integrated Behavioral Health Interventions for Substance Use Disorders | Focuses on the theoretical foundations, research and strategies for identifying, intervening and/or referring patients in primary care and other healthcare settings that present with substance use disorders or problem use. Provides detailed information about the clinical model of SBIRT (Screening, Brief Intervention, and Referral to Treatment), along with strategies for implementing sustainable business models for SBIRT in healthcare environments. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 670 or IBC 780 (Integrated Behavioral Health Interventions for Substance) |
| IBC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 701 | Models of Integrated Primary Care | Provides an overview of the primary care environment as well as current models of integrated primary behavioral health care. Reviews and critiques models of health care based on their success in impacted patient health outcomes and improving physician satisfaction, along with fiscal and care delivery systems for each. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 702 | Brief Interventions in Primary Care | Provides an overview of evidence-based care for the integrated primary care environment. In particular, reviews and applies the most common approaches to addressing co-morbid behavioral and medical conditions, including but not limited to brief psychotherapy, adherence enhancement, lifestyle medicine, and others, using cognitive-behavioral, acceptance and commitment therapy, solution-focused, and motivational interviewing approaches. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only IBC 691 (Brief Interventions in Primary Care) or IBC 702 |
| IBC | 704 | Psychopathology & Personality in Integrated Primary Care | Covers the basic principles of the Biodyne Model, which are applicable to all behavioral health cases, both in outpatient mental health settings and in integrated care settings. Core knowledge forms the basis for success as a behavioral care provider in integrated medical settings. Includes common psychotherapist mistakes, evidence-based treatment, basics of the Biodyne Model, survey of integrated care approaches, defense mechanisms, case conceptualization strategies for maximum efficiency, and when to refer a patient for specialty care. Presents in detail common conditions (anxiety and depression), with a focus on how these conditions can be subcategorized for maximum treatment efficiency. Emphasizes the development of comprehensive treatment plans (including psychotropic medications, group programs, and other modalities). Presents didactic material in the context of actual cases. Strong focus on case examples, both illustrative cases provided by the instructor and the students' cases (past and/or current). | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 708 | Evidence-Based Behavioral Intervention III | Covers advanced principles of evidence-based integrated behavioral care in primary care and other medical settings. Continuation and third course in the Evidence Based Behavioral Intervention I and II sequence. Further develops evidence-based approaches in the assessment and treatment of children and families and deepens and expands the skills in specific applications of assessment and treatment modalities for adults. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 712 | Population-Based Behavioral Health Management | Overview epidemiology for health care followed by population-based approaches to behavioral intervention. Epidemiology includes concept of populations; descriptions and definitions of health and disease; measurement of health (measures, morbidity, mortality and health); designs for studying the health of populations and standardization of population health measures. Population-based management includes definitions of medical management, planning health care for populations and population health outcomes; quality of care and economic analysis of population-based interventions; adjunctive treatments as a core component of population-based interventions. Also, advanced application of population-based behavioral interventions with a focus on design, measures, analysis, results and discussion of current approaches. Includes predictive modeling methods for defining populations; interventions focusing on stepped-care approaches; engagement strategies, interventions, measurement, and follow-up. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IBC | 714 | Quality and Performance Measurement, Improvement, and Incentives in Health Care | Overview of healthcare quality management, emerging models of healthcare performance measurement, and models of pay for performance incentives in healthcare designed to reward providers for attaining quality of care goals. Prepares behavioral clinicians to provide services that are consistent with best practices in quality management and performance measurement in healthcare and to provide care that is consistent with performance incentive programs that are present or on the horizon. A key characteristic of healthcare reform is increased focus on provider quality of care, accountability for quality via performance measurement, and aligning provider incentives to meet national and regional quality of care performance targets. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 718 | Healthcare Systems: Organization, Delivery and Economics | Provides an overview of the U.S. healthcare system with a focus on economics and policy. Primary goals of the course are to enable students to recognize the relevance of economics to healthcare and to apply economic principles to better understand health-related issues; understand the U.S. healthcare delivery system in the context of social, policy, and economic factors; evaluate the evolving nature of healthcare reform initiatives and their implications for clinical practice, financing, research and policy; analyze public healthcare policy from an economic perspective. Students also focus on behavioral healthcare economics and policy and the economics of behavioral health services in medical settings. Students also understand the medical cost offset effect, including economic benefits of behavioral interventions for co-morbid medical and behavioral conditions, measurement of medical cost-offset, and cost-offset for psychopharmacology and specific behavioral conditions. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 720 | Behavioral Health Entrepreneurship | Provides an introduction to the essential entrepreneurship skills for the behavioral healthcare clinician. Focuses on entrepreneurial skills designed to prepare the behavioral clinician to start a new business venture or revitalize an existing organization or business, to meet the needs of the evolving healthcare system and marketplace. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 724 | Behavioral Health Management | Presents an introduction to the roles and responsibilities of supervisor/manager in a healthcare organization. Provides behavioral health professionals moving into management with the necessary knowledge base and skills to be an entry-level manager and focuses on the further knowledge acquisition needed to become an experienced, effective manager and leader. In addition, discusses the larger context in which healthcare businesses operate—healthcare reform, regulations and technological changes. Participants take time to look at personal characteristics, interpersonal styles and presentation that affect how one is perceived and responded to in an organization. Too often we have observed individuals with high-level clinical skills moving into management without the requisite skills and understanding of issues, restricting their ability to be successful. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only IBC 724 or IBC 780 (Behavioral Health Management) |
| IBC | 728 | Cultural Diversity, Health and Illness | Focuses on the relationship among cultural diversity, health and illness, and multicultural psychotherapy in primary care and other healthcare settings. Prepares behavioral clinicians to identify the relationship between cultural diversity and health and illness and to use effective psychotherapy informed by cultural diversity in primary care and related medical settings. | N | LEC | N | OPT | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IBC | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IDN | 101 | Elementary Indonesian I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| IDN | 102 | Elementary Indonesian II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites: IDN 101 with C or better |
| IDN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| IDN | 201 | Intermediate Indonesian I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 102 with C or better |

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| IDN | 202 | Intermediate Indonesian II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: IDN 201 with C or better |
| IDN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| IDN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| IDN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| IED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 410 | History American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H & C | Credit is allowed for only IED 410 or 510 |
| IED | 430 | Lang/Literacy-Indig Peoples | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (HU or SB) & C | Credit is allowed for only IED 430 or 530 |
| IED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| IED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| IED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| IED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| IED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| IED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 510 | History of American Indian Education | Philosophical and historical review of the development of American Indian education policies in both traditional and contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only IED 410 or 510 |
| IED | 530 | Language/Literacy-Indig People | Examines issues, policies, theoretical foundations, and practices of indigenous peoples and other language minority communities from a sociolinguistics and language reclamation perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only IED 430 or 530 |
| IED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| IED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| IEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |
| IEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 210 | Introduction to Industrial Engineering | History of IE: IE career paths; ethical, social, and contemporary issues; introduces IE techniques, methods, and their application; case studies. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: IEE 100(or BME100,CHE100,CEE100,CSE101,ECE100,EEE101,EGR101,FSE100,MAE100,MSE100, or SES 100) with C or better; MAT 265 (or MAT 270) with C or better |
| IEE | 220 | Business and Industrial Engineering | Introduces business for industrial engineers, including business/financial structures, fundamentals of cost and accounting, role of business/engineering in society. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student: Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: minimum 25 earned hours |

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| IEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 300 | Economic Analysis for Engineers | Economic evaluation of alternatives for engineering decisions, emphasizing the time value of money. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student: MAT 265 or 270 with C or better and Introduction to Engineering course with C or better OR Engineering Management Minor/Concentration: MAT 265 or 270 with C or better |
| IEE | 305 | Information Systems Engineering | Overview of computer and information systems applications. Topics include client/server; distributed computing; networks; process modeling; e-commerce; enterprise applications; Internet. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student and CSE 205 OR other majors with minimum 3.00 GPA and CSE 205 |
| IEE | 369 | Work Analysis and Design | Planning, analysis, and design of methods of accomplishing work. Emphasizes human factors, work planning, methods analysis and design, and work measurement. Applications in diverse fields. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student or Engineering Management Minor/Concentration; Pre- or corequisite(s): FIN 300 or IEE 300 |
| IEE | 376 | Operations Research Deterministic Techniques/Applications | Industrial systems applications with deterministic operations research techniques. Resource allocation, product mix, production, transportation, task assignment, networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): CSE 205 with C or better; MAT 242, 342 or 343 with C or better; or Industrial Engineering graduate student |
| IEE | 380 | Probability and Statistics for Engineering Problem Solving | Applications-oriented course with computer-based experience using statistical software for formulating and solving engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate or Engineering Management minor; MAT 266 (or 271) with a C or better; or Industrial Engineering graduate student |
| IEE | 381 | Lean Six Sigma Methodology | Define, measure, analyze, improve and control (DMAIC) steps of six sigma methodology for business and quality improvement. Reviews the necessary statistical tools and illustrates their integration into the problem-solving process. Overview of lean principles and design for six sigma. Unique features of applying six sigma and DMAIC in transactional and service organizations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 380 with C or better; Credit is allowed for only IEE 381, 498 (Six Sigma Methodology) or 498 (Six Sigma Green Belt) |
| IEE | 382 | Probability and Statistics Lab | Applied modeling and data analysis using Excel and Minitab. | N | LAB | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Pre-requisites: Industrial Engineering or Engineering Management BSE student; Co-requisite: IEE 380 |
| IEE | 385 | Engineering Statistics: Probability | Conditional probability, common probability models, Goodness-of-fit tests and reliability models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): undergraduate Fulton Engineering major or Engineering Management minor with IEE 380 with C or better OR graduate Industrial Engineering major |
| IEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 405 | Developing Information Systems Applications | Analysis and design of distributed information system applications using object and relational architectures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student |
| IEE | 412 | Introduction to Financial Engineering | Intensive exploration course of three phases: (1) a preparation phase for the terminology and financial lingo to be used throughout the semester, (2) introduction of more advanced financial topics such as portfolio formation, assessment and traditional portfolio theory, (3) several financial engineering topics such as the application of stochastic models to stock and derivatives pricing and financial risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): IEE 300 and 380 with C or better |
| IEE | 421 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s) with C or better: IEE 376, 380, 385. Credit is allowed for only IEE 421 or IEE 498 (Urban Operations Research) or IEE 521 or IEE 598 (Urban Operations Research) |
| IEE | 426 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: IEE 376 and 380 with C or better; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 431 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): Fulton Engineering undergraduate, Digital Culture (Media Processing) BA, or Engineering Management minor or concentration; junior or senior standing. Credit is allowed for only IEE 431 or IEE 541 |
| IEE | 437 | Human Factors Engineering | Studies the human psychological and physiological factors that underlie the design of equipment and the interaction between people and machines. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student OR other majors with minimum 3.0 GPA; Credit is allowed for only IEE 437 or 547 |
| IEE | 454 | Risk Management | Methods and tools for identifying, assessing, mitigating and controlling risk in business and engineering design activities. Decision tools include cost-benefit analysis, decision trees, value of information, Bayesian statistical decision making, fault trees, and failure modes and effects analysis (FMEA). | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: ECN 221 or IEE 380 with C or better; Engineering major OR Engineering Management Minor/Concentration; Junior or Senior student |

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| IEE | 456 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Junior or senior Engineering student OR Engineering Management Minor/Concentration; Credit is allowed for only IEE 456 or 556 |
| IEE | 458 | Project Management | Life-cycle processes for selecting and managing large-scale projects to ensure successful completion. Topics include project phases, defining milestones, work breakdown structure, group decision making and teamwork, organizational structure, human resource management, technological and economic feasibility, configuration management, budget control, and resource allocation and scheduling. Use of modern tools for planning and controlling project performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: ECN 221 or IEE 380 with C or better; Junior or senior Engineering OR Engineering Management Minor/Concentration student |
| IEE | 461 | Production Control | Techniques for the planning, control, and evaluation of production systems. Forecasting, inventory control, scheduling, enterprise requirements planning, supply chain design, and coordination. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; IEE 376 with C or better; IEE 380 with C or better |
| IEE | 470 | Stochastic Operations Research | Modeling and analysis with emphasis on stochastic operations research. Models for stochastic processes, including Markov chains, queuing and decision analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): Industrial Engineering, Engineering Management or Computer Science undergraduate; IEE 376 and IEE 385 with C or better; or Industrial Engineering graduate; Credit is allowed for only IEE 470 or 598 (Stochastic Operations Research) |
| IEE | 474 | Quality Control | Basic statistical process control techniques, capability analysis, design of experiments, and acceptance sampling plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 380 with C or better |
| IEE | 475 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queuing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or other majors with minimum 3.00 GPA; CSE 205 and IEE 380 with C or better; Credit is allowed for only IEE 475 or IEE 545 |
| IEE | 477 | System Dynamics and Thinking | Methods for the modeling and analysis of system dynamics; metrics to measure business performance; continuous simulation tools for evaluation of system performance over time. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: CSE 205 with C or better; IEE 380 with C or better; Credit is allowed for only IEE 477 or 498 (System Dynamics Engineering) |
| IEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | |
| IEE | 485 | Systems Design Capstone I | Senior capstone project provides students with the skills required to effectively complete a capstone project in design and development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): BSE Engineering Management major with pre- or corequisite(s): IEE 475 or 477; or BSE Industrial Engineering major with IEE 376 with C or better and pre- or corequisite(s): IEE 475 or 477 |
| IEE | 486 | Systems Design Capstone II | Project in design and development. Individual or team capstone project in creative design and synthesis. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Pre-requisites: BSE Engineering Management or Industrial Engineering major; Senior standing; IEE 485 with C or better |
| IEE | 490 | Project in Design and Development | Individual or team capstone project in creative design and synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | L | Prerequisite(s): BSE Industrial Engineering major; IEE 376 with C or better and pre- or corequisite(s): IEE 475 OR BSE Engineering Management major; pre- or corequisite(s): IEE 475 |
| IEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-6 | | Prerequisite(s): Barrett Honors student |
| IEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-4 | | |
| IEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-7 | | |
| IEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-3 | | |
| IEE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 505 | Information Systems Engr | Studies information systems application engineering. Topics include information technology, data modeling, data organization, process mapping, application and database engineering, and user interface development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |

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| IEE | 506 | Web-Enabled Decision Support Systems | Development and analysis of Web-enabled applications for decision support. Topics include: (1) Web application development using ASP.NET; (2) design for computing scalability, interface usability and cyber security; and (3) use of application development skills and design concepts to develop a decision support system consisting of database, analytical data processing, expert knowledge and reasoning, and user-friendly interface for enabling transitions from data to information, knowledge and decisions. Knowledge of database development is necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 506 or 598 (Design of Computational Systems) |
| IEE | 511 | Analysis of Decision Processes | Methods of making decisions in complex environments and statistical decision theory; effects of risk, uncertainty, and strategy on engineering and managerial decisions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 498 (Analysis of Decision Processes) or 511 |
| IEE | 512 | Introduction to Financial Engineering | Introductory course on financial engineering covering traditional portfolio theory, forwards, futures, financial stochastic models, option pricing, and risk management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 520 | Statistical Learning for Data Mining | Surveys data analysis methods for massive data sets and provides experience in analysis with computer software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; BMI 515 or IEE 572 or IEE 578; Credit is allowed for only BMI 555 or IEE 520 |
| IEE | 521 | Urban Operations Research | Probabilistic modeling and analysis of transportation systems (car, bus, train) and emergency service systems (fire, police, ambulance) using functions of random variables, geometric probability, queueing theory, location theory, network analysis and graph applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 421, 498 (Urban Operations Research), 521 or 598 (Urban Operations Research) |
| IEE | 526 | Operations Research in Healthcare | Quantitative methods for modeling and analysis of healthcare systems to address operational and tactical decision-making problems. Topics include forecasting, scheduling, decision making, facility location and layout, staffing, quality control and supply chain management in hospitals and healthcare delivery facilities. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only IEE 426, 498 (OR in Hospitals), 526 or 598 (OR in Hospitals) |
| IEE | 530 | Enterprise Modeling | Focuses on social, economic, and technical models of the enterprise with emphasis on the management of technological resources. Includes organization, econometric, financial, and large-scale mathematical models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 533 | Scheduling | Provides the basic theory of scheduling and introduction to the applications domain. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 534 | Supply Chain Modeling and Analysis | Techniques for modeling and analysis of supply chains. Inventory management, transportation/location models, value of information, channel alignment, risk pooling, contracts. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): IEE 574 or 620 |
| IEE | 535 | Intro Intl Logistics Systems | Exploratory project-oriented course that addresses domestic and international logistics practices from a high-level descriptive perspective and an analytical model-based perspective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 541 | Engineering Administration | Introduces quantitative and qualitative approaches to management functions, engineering administration, organizational analysis, decision making, and communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only IEE 431 or 541 |
| IEE | 545 | Simulating Stochastic Systems | Analyzes stochastic systems using basic queueing networks and discrete event simulation. Basic network modeling, shared resources, routing, assembly logic. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 475 or 545 |
| IEE | 547 | Human Factors Engineering | Study of people at work; designing for human performance effectiveness and productivity. Considerations of human physiological and psychological factors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only IEE 437 or 547 |
| IEE | 552 | Strategic Technological Planning | Studies concepts of strategy, strategy formulation process, and strategic planning methodologies with emphasis on engineering design and manufacturing strategy, complemented with case studies. Presents and uses an analytical executive planning decision support system throughout course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 556 | Introduction to Systems Engineering | Foundation course addressing the concepts needed for successful system planning, design and build process. Topics include successfully bringing large-scale systems to completion on schedule and on budget, modeling and cost estimating techniques, risk and variability. Graduate students are expected to have a background in and understanding of large-scale systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering graduate student; Credit is allowed for only IEE 456, 556 or 598 (Intro to Systems Engineering) |
| IEE | 561 | Production Systems | Understanding how factories operate, how performance is measured, and how operational changes impact performance metrics. Operational philosophies, increasing production efficiency through quantitative methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 570 | Advanced Quality Control | Process monitoring with control charts (Shewhart, cusum, EWMA), feedback adjustment and engineering process control, process capability, autocorrelation, selected topics from current literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Engineering Graduate student |

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| IEE | 571 | Quality Management | Total quality concepts, quality strategies, quality and competitive position, quality costs, vendor relations, the quality manual, and quality in the services. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 572 | Design Engineering Experiments | Analysis of variance and experimental design. Topics include strategy of experimentation, factorials, blocking and confounding, fractional factorials, response surfaces, nested and split-plot designs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 573 | Reliability Engineering | Nature of reliability, time to failure densities, series/parallel/standby systems, complex system reliability, Bayesian reliability, and sequential reliability tests. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 574 | Appl Deterministic Oper Rsch | Develops advanced techniques in operations research for the solution of complex industrial systems problems. Goal programming, integer programming, heuristic methods, dynamic and nonlinear programming. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Industrial Engineering MS, MSE or PhD student |
| IEE | 575 | Appl Stochastic Oper Rsch Mdls | Formulate and solve industrial systems problems with stochastic components using analytical techniques. Convolution, continuous-time Markov chains, queues with batching, priorities, balking, open/closed queuing networks. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 578 | Regression Analysis | Regression model building oriented toward engineers and physical scientists. Topics include linear regression, diagnostics, biased and robust fitting, nonlinear regression. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 579 | Time Series Analy/forecasting | Forecasting time series by regression-based, exponential smoothing, and ARIMA model techniques; uses digital computer programs to augment the theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisite: Engineering Graduate student |
| IEE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 581 | Six Sigma Methodology | The six sigma process improvement strategy of define, measure, analyze, improve, and control (DMAIC). Integrates and deploys statistical methods and other six sigma problem solving via the DMAIC framework. Requires background in undergraduate engineering statistics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 582 | Response Surfaces/Process Opt | Classical response surface analysis and designs including steepest ascent, canonical analysis, and multiple responses. Other topics include process robustness studies, robust design, and mixture experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Pre-requisites: Engineering MS, MSE or PHD; IEE 572 with C or better |
| IEE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 585 | Six Sigma Capstone. | The DMAIC (define, measure, analyze, improve, control) improvement strategy is applied in the formulation and execution of a six sigma project. | N | PRA | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 3 | | Prerequisite(s): Engineering Graduate student |
| IEE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PHD student |
| IEE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgrm | 1-4 | | Pre-requisite: Engineering Graduate student |

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| IEE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 605 | Foundations of Information Systems Engineering | Introduces science and engineering technologies of information systems design and analysis with focus on industrial engineering applications. Topics include: design and analysis of computational algorithms; and data mining techniques for classification, clustering, feature extraction and data reduction problems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: Industrial Engineering Graduate student; Credit is allowed for only IEE 598 (Found Info Syst Engr) or 605 |
| IEE | 620 | Optimization I | First course of the PhD-level deterministic course series. Covers foundations of optimization and linear programming. Prior working knowledge of linear algebra and knowledge of how to formulate linear programs is required for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 622 | Optimization II | Introduces computational methods to solve optimization problems with integer variables and the mathematical theory behind them. Follows formulation of integer programming models with a survey of relaxation, decomposition and cutting-plane methods. Discusses various practical problems such as facility location, transportation and distribution problems. Assigns computational examples using the software IBM ILOG OPL. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 620; Credit is allowed for only IEE 622 or 598 (Optimization II) |
| IEE | 640 | Probability & Stochastic Processes | Presents fundamentals of probability and stochastic processes from a non-measure theoretic point-of-view to develop (a) basic model building and probabilistic reasoning skills, and (b) an understanding of important qualitative characteristics of some basic stochastic processes used to model dynamical systems with noise. Topics include a review of probability theory with particular attention to conditional probability and expectation; Markov chains; Renewal theory and the Poisson process. Considers applications in reliability, inventory theory, queueing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisite: IEE 470, Graduate Industrial Engineering major; Credit is allowed for only IEE 598 (Prob & Stoch Model) or 640 |
| IEE | 670 | Mathematical Statistics | Introduction to the field of mathematical statistics at a level intended for first-year PhD students in Industrial Engineering. Builds a solid background in the principles, concepts, and techniques of mathematical statistics. Prepares students for advanced study and research in statistics, and is useful for understanding statistical data analysis techniques and developing statistical thinking. Completion of at least one course in probability and statistics is required prior to taking this class. | N | LEC | N | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 672 | Adv Topics-Experimental Design | Multilevel and mixed-level factorials and fractions, design optimality, incomplete blocks, unbalanced designs, random effects and variance components, analysis of covariance. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 3 | | Pre-requisites: Engineering MS, MSE or PHD student; IEE 572 with C or better |
| IEE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Pre-requisite: Industrial Engineering MS, MSE or PHD student |
| IEE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IEE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Industrial, Systems & Operations Engineering Prgm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IFT | 100 | Introduction to Information Technology | Project-based introduction to the key concepts, tools and devices underlying today's technologies. Introduces computer hardware, software and system architecture, the Internet, the World Wide Web and information technology ethics. Forms a foundation for future courses offered in the Information Technology major and the information technology discipline. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | |
| IFT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-3 | | |
| IFT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 200 | Information Modeling, Storage and Retrieval | Notations, tools and languages for modeling, representing and manipulating information; database creation, access and management in the context of a controlling application. Analyzes information storage needs and design of an appropriate representation. Project-based access to information through tools and languages such as structured query language. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |
| IFT | 201 | Computer and Network Systems: Organization and Administration | Fundamentals of computer networks, computer organization and computer operating systems. Components, tools and languages for configuring and administering computer systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite is CST 200 |
| IFT | 202 | Foundations of Information and Computer System Security | Project-based introduction to privacy, ethics, legal, social and professional responsibilities for information technology. Principles of information security and assurance and their implications on access. Tools and methods to identify intrusion, best security practices. Securing communications and applications. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 200 |
| IFT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-5 | | |
| IFT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 301 | Introduction to Interactive Media | Human-computer interaction design for rich media systems. Introduces design processes, tools and principles for applications that are highly interactive with their users and which include multiple input/output modalities and multimedia. Project-driven course. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 100 and 200 |
| IFT | 359 | Internet Networking Protocol | Computer networking for application, transmission control and network layers using the Internet protocols as a model; reliability and security. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 250 or IFT 201 or BAS major |
| IFT | 383 | Shell and Script Programming with UNIX | UNIX operating system programming of shells, environment and 4th-generation languages and tools, such as sed, awk, perl, grep, make. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 100 or BAS major |
| IFT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 401 | Information Technology Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): senior standing |
| IFT | 402 | Information Technology Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEL | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisite: IFT 401 |
| IFT | 481 | Information System Security | Implementation, development, and analysis of computer and network security policies, legal ramifications and development and analysis of risk management measures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 359 (or CST 359); IFT 202 |
| IFT | 482 | Network Forensics | Use and creation of advanced network forensics tools: intrusion detection and prevention, honeynets, traffic routing and management, and data reduction and graphing tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 481 (or CST 481) |
| IFT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | |
| IFT | 488 | Systems Administration of UNIX | UNIX administration of system and user services using command line and GUI tools. System security and forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): CST 386 or IFT 201; Pre- or corequisite(s): IFT 383 (or CST 383) |
| IFT | 489 | Network Administration with TCP/IP | Configuration and installation of networks: addressing, routing, naming, and LAN and MAN services. Network security checking, monitoring, and basic forensics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): IFT 359 (or CST 359); Pre- or corequisite(s): IFT 383 (or CST 383) |
| IFT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | | Prerequisite(s): Barrett Honors student |
| IFT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Information Technology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IFT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | |
| IFT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IFT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-3 | | |
| IFT | 510 | Principles of Computer and Information Technology | Comprehensive introduction to computer and information technology (IT). Provides a detailed understanding of computer architecture, system software and important related issues in an IT context. Forms a technical foundation for understanding current technologies and how they work. Topics include principles of systems' physical architecture, operating systems and application software, storage and systems management as well as current developments in cloud computing, green IT, social networking systems, and Internet search. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 520 | Principles of Telecommunication Technology | Basic communication technology concepts from an information technology perspective. Addresses signals, spectra and bandwidth; attenuation, distortion and noise; filtering, equalizing, modulation and multiplexing; information measurement, source and channel coding, channel capacity, baseband data transmission, digital modulation and spread-spectrum systems; local area networks and architecture and performance; layered network architecture, protocols, switching techniques, TCP/IP, traffic engineering and basic capacity analysis. Focuses not on detailed component design but on understanding the interrelationships of these concepts and telecommunication systems to support broad system design and management. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 530 | Information Analysis, Modeling, Representation, and Communication | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 540 | Software Development for Information Technology | Teaches proven techniques for modeling information requirements and organizational data resources with a strong focus on gleaning information from data. Students learn how to discover and document database requirements, functional system requirements, and user interface requirements at a level appropriate for advanced information technology practitioner. Covers techniques including entity-relationship modeling for data analysis, functional dependency and normalization for the logical design of the database, Structured Query Language (SQL) for data management, and use cases for learning the process of requirement specification. | N | LEC | N | GNA | Ira A. Fulton Engineering | Information Technology | 3 | | Pre-requisites: IFT 530 |
| IFT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IFT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Information Technology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Information Technology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IFT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Information Technology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| IMD | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| IMD | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| IMD | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IMD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 120 | Drawing for Industrial Design | Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for industrial design thinking. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major |
| IND | 121 | Principles for Industrial Design I | Industrial design as a language and process for creative thinking and realization. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Industrial Design major. Corequisite(s): IND 122 |
| IND | 122 | Principles for Industrial Design II | Continued exploration of industrial design as a language and process for creative thinking and realization. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): IND 120 with C or better; Environmental Design or Industrial Design major. Corequisite(s): IND 121 |
| IND | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 227 | Visual Methods for Problem Solving | Introduces conceptual design activity based on the mind-eye-media feedback loop. Graphic language used to represent conjecture, analysis, synthesis of objects, and their contexts. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student, IND 122 with C or better; Passed Milestone; Co-requisite: IND 260 |
| IND | 228 | Imaging and Visualization | Design activities stressing graphic language abstraction practiced for presentation. Discusses structure of criticism, including description, interpretation, and evaluation. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 227 with C or better; Co-requisite: IND 261 |
| IND | 242 | Materials and Design | Materials application in design. Introduces characteristics and properties of metals and organic materials, including plastics, and inorganic materials. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 243 | Design for Ecology and Social Equity | Explores the role of design in the ecological crisis; materials, processes, strategies and methods to design more ecologically friendly and socially equitable products. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 260 | Industrial Design I | Introduces the method and process of the industrial designer. Determinants necessary in small product design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 122 with C or better; Passed Milestone; Co-requisite: IND 227 |
| IND | 261 | Industrial Design II | Issues of physical form development related to product and design; form development properties of paper, fibers, wood, metal, and plastics. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 260 with C or better; Co-requisite: IND 228 |

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| IND | 316 | 20th-Century Design I | European and American design from 1850 to 2000 with thematic emphases on worldview, technology, transportation, economics and nature. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Prerequisite(s): minimum 45 hours |
| IND | 317 | 20th-Century Design II | European and American design from 1850 to 2000 with thematic emphases on communication, education, material culture, politics and society. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Prerequisite(s): minimum 45 hours |
| IND | 327 | Presentation Graphics | Studies methods for portfolio and professional product presentation using graphic media for information transfer. Stresses aesthetic judgment, organization, and craftsmanship. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Industrial Design student; Co-requisite: IND 360 |
| IND | 328 | Graphics for Industrial Design | Investigates and applies applications and planning to the development of an identity for a product line structured as a system. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Industrial Design student; IND 327 with C or better; Co-requisite: IND 361 |
| IND | 344 | Human Factors in Design | Man-machine environment systems; human characteristics and behavior applied to design of products, systems, and their operating environment. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| IND | 354 | Principles of Product Design | Influences of physical and mechanical concepts in product design; mechanisms, kinematics, and fastening systems. Concepts of analysis for product design. Influences of concepts on aesthetics. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: PHY 111 with C or better; Digital Culture: Design, Industrial Design BSD, or Pre-Industrial Design major |
| IND | 360 | Industrial Design III | Methods of visual thinking, conceptualization, and ideation related to building skill levels in professional design presentation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 261 with C or better; Co-requisite: IND 327 |
| IND | 361 | Industrial Design IV | Emphasizes developing ideas into a complete functional product, including survey and application of aesthetics, human factors, materials, and manufacturing. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 360 with C or better; Co-requisite: IND 328 |
| IND | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 460 | Design Project I | Complete analysis of the product unit as an element of mass production, featuring marketing, technology, human factors, and visual design. Emphasizes professional standards. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design student; IND 361 with C or better; Co-requisite: IND 484; IND 470 |
| IND | 461 | Design Project II | Product design, with emphasis in systems interaction. Culmination of design process and technique. Encourages individual project direction. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Industrial Design BSD student; IND 460 with C or better |
| IND | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| IND | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| IND | 470 | Professional Practice for Industrial Design | Business procedures, management techniques, accounting systems, ethics, and legal responsibilities of the design professions. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisite: Industrial Design student; Co-requisite: IND 460 or Design Studies minor student |
| IND | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Industrial Design student; IND 361 with C or better; Co-requisite: IND 460 |
| IND | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| IND | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| IND | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| IND | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| IND | 521 | Advanced Industrial Design Studio I | Design language, motivation and inspiration, form exploration sketching, rough form study mock-ups, form development, and presentation. Product redesign. Students create new design language proposals for an existing product and redesign the product based on one of these languages. Provides instruction and opportunities to understand product design language and how to redesign existing products with different design guidelines. Results include evidence of concept development (sketches, drawings, models); functional development; human factors and ergonomic considerations; materials and process specifications; sustainability recommendations; and appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Industrial Design major. Credit is allowed for only IND 521 or IND 590 (Advanced Industrial Design Studio I) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| IND | 522 | Advanced Industrial Design Studio II | New product development with emphasis on design research, problem solving and functional/aesthetic development. Preliminary research about human behavior and health promotion. Based on the research findings, students conduct design research in teams and work on individual design projects. Student project results include evidence of concept development (sketches, drawings, models); functional development; human factors and ergonomic considerations; materials and process specifications; sustainability recommendations; and final appearance visual materials and models (virtual and physical). Project-based course includes readings, presentations, critical analysis, discussion, and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 521. Corequisite(s): DSC 501. Credit is allowed for only IND 522 or IND 590 (Advanced Industrial Design Studio II) |
| IND | 544 | Human Factors Systems and Documentation | Advanced topics associated with theory and methods of human factors in design. Individual projects stressing problem organization, evaluation, and documentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| IND | 548 | Design for Sustainable Development | Research on designing systems that are economically viable, ecologically friendly, and socially equitable. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 621 | Advanced Industrial Design Studio III | Structured around the Design School traveling-studio model, this studio challenges students to identify new design concepts that improve society and the natural environment while also delighting users and creating value for business. For approximately one week, students travel to an off-campus location to examine a local condition there for which new design solutions are needed. Students return to ASU and continue working on the project for the semester. Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 522 |
| IND | 622 | Advanced Industrial Design Studio IV | Challenges students to create new design concepts that improve society and the natural environment while also delighting users and creating value for business. Requires some independent direction by the student; however, instructor assigns deadlines and expectations for deliverables, and requires cooperation and collaboration among students. Project-based course includes readings, presentations, critical analysis, discussion and the public exhibition and presentation of design work. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): IND 621 |
| IND | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| IND | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| IND | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 111 | Interior Design Issues and Theories | Interiors issues, theories, and philosophies. Emphasizes unique social and cultural factors that shape 20th-century design concepts. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | |
| INT | 120 | Design Drawing and Media | Visual thinking: Development of freehand drawing techniques as a language and tool to explore, communicate, and process ideas. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Environmental Design or Interior Design major |
| INT | 121 | Introduction to Computer Modeling for Interior Design | Computers in interior design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | CS | Credit is allowed for only INT 121 or 320 |
| INT | 123 | Introduction to Computer-Aided Design and Building Information Modeling | Introduces AutoCAD computer-aided design and Revit building information modeling principles and strategies for designers of the built environment. | N | LAB | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 131 | Design and Human Behavior | Applies conceptual design to issues of programming and space planning, user needs, and behavior. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | SB | |
| INT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 221 | Principles of Design | Applied visual vocabulary: studio experience exploring applications, process and conceptual development of the principles of order and composition. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 120 with C or better; Environmental Design or Interior Design major. Corequisite(s): INT 222 |
| INT | 222 | Principles of Design Lecture | Applies the visual vocabulary: explores the principles of organization through examination of historical precedence and contemporary interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): Environmental Design or Interior Design major. Corequisite(s): INT 221 |
| INT | 223 | Drafting for Interior Design | Orthographic, paraline, axonometric, and perspective projection; shades and shadows; and basic descriptive geometry for interior designers. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 261 |
| INT | 253 | Interior Materials, Finishes, and Specifications | Survey, evaluation, and specification of materials, finishes, and performance criteria for interiors. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |
| INT | 261 | Interior Design Studio I: Residential | Studio problems in interior design related to behavioral response in personal and small-group spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; Passed Milestone; Co-requisite: INT 223 |
| INT | 262 | Interior Design Studio II: Hospitality | Focuses on environments that entertain or host the public, including but not limited to nightclubs, restaurants, theaters, hotels, city and country clubs, golf facilities, cruise ships and conference facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design student; INT 261 with C or better |
| INT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 310 | History of Interior Design I | Evolution of interior design as an expression of cultural influences from the ancient periods to 1835. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: ARS 102 with C or better |
| INT | 311 | History of Interior Design II | Evolution of interior design as an expression of cultural influences 1835 to present. Analysis of interior architecture, planning and lighting of interior spaces, and furniture. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H | Pre-requisites: INT 310 with C or better |
| INT | 341 | Interior Codes: Public Welfare and Safety | Codes and regulations as performance criteria for interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisite: Interior Design student; Co-Requisites: INT 253; INT 262 |
| INT | 351 | Ambient Environment | Surveys environmental control systems, acoustics, and lighting issues. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Interior Design major; PHY 101 with C or better. Co-requisites: INT 352, INT 362 and INT 381; OR Digital Culture: Design major |
| INT | 352 | Construction Methods in Interior Design | Design theory related to analysis, materials, and building techniques of horizontal and vertical construction in interior design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisites: INT 362; INT 381 |
| INT | 354 | Construction Documents | Elements of construction drawing sets, application of codes and specifications, and contract administration. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Interior Design student; Co-requisite: INT 363 |
| INT | 362 | Interior Design Studio III: Hospitality and Retail | Investigates interior design issues in hospitality and retail environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; Co-requisites: INT 351, INT 352 and INT 381 |
| INT | 363 | Interior Design Studio IV | Explores the poetics of materials and their assemblage in the design of public and private spaces. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 362 with C or better; Co-requisite: INT 354 |
| INT | 381 | Preinternship Seminar | Preparation of internship materials that produce and enhance a successful internship experience. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite: INT 262 |
| INT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 412 | History of Decorative Arts in Interiors | Design of decorative arts as an expression of cultural influences and as an extension of interior spaces. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Prerequisite(s): INT 311 with C or better. Credit is allowed for only INT 412 or INT 515 |
| INT | 413 | History of Textiles in Interior Design | Cultural and historical expression of textiles as related to interiors. | N | PRA | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): INT 412 with C or better. Credit is allowed for only INT 413 or INT 516 |
| INT | 415 | Latin American Design | The impact of Latin American culture and civilization on design throughout the Americas. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Minimum Junior standing |
| INT | 446 | Furniture Design and Production | Design, construction, cost estimating, and installation in interior furniture and millwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisite: Graphic Design BSD, Interior Architecture BSD or Industrial Design BSD student |

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| INT | 464 | Interior Design Studio V: Work Environments | Studio problems in interior design-related issues in work environments. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 363 with C or better; Co-requisites: INT 484; INT 471 |
| INT | 465 | Interior Design Studio VI: Institutional Design | Advanced interior design problem solving related to institutional facilities. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Interior Design student; INT 464 with C or better; Co-requisite: INT 472 |
| INT | 471 | Facilities Management | Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | |
| INT | 472 | Professional Practice for Interior Design | Business procedures, project control, fee structures, and professional product liabilities. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 2 | | Pre-requisites: Interior Design student; Co-requisite: INT 465 |
| INT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisites: Interior Architecture BSD student; DSC 483 or INT 381 with Y grade |
| INT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| INT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| INT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| INT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| INT | 515 | Decorative Arts in Historic Interiors: A Thematic Overview | A thematic overview of decorative arts used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 412 or INT 515 |
| INT | 516 | Textiles in Historic Interiors: Appearance, Function, Symbolism | Overview of textiles used in historic interiors that explores their aesthetic, functional, and symbolic contribution. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Prerequisite(s): Herberger Institute of Design and the Arts graduate major. Credit is allowed for only INT 413 or INT 516 |
| INT | 521 | Advanced Interior Architecture Studio I | Studio problems in interior architecture related to the integration of building structure and systems with the behavioral response to personal spaces. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): Master of Interior Architecture major. Credit is allowed for only INT 521 or INT 590 (Advanced Interior Architecture Studio I) |
| INT | 522 | Advanced Interior Architecture Studio II | Investigates interior architecture issues, including construction, technology, programmatic and environmental determinants. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 521; Corequisite(s): INT 527; Credit is allowed for only INT 522 or INT 590 (Advanced Interior Architecture Studio II) |
| INT | 527 | Contemporary Design Theory | Aesthetic, political, economic, and social theories that have shaped modern design; theory as the basis for design philosophies. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 529 | Design Criticism | Applies critical methods to design as material culture and human expression; evaluates achievement versus intention. | N | SEM | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Herberger Institute of Design and the Arts Graduate student |
| INT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| INT | 621 | Advanced Interior Architecture Studio III | Structured around the Design School traveling-studio model, based on design problems emphasizing the global context of interior architecture as it influences interior space and architectural form. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 522 |
| INT | 622 | Advanced Interior Architecture Studio IV | Individual, student-initiated capstone project reflecting a culminating synthesis of interior architecture ideas. | N | STO | N | GNA | Herberger Inst Design & Arts | The Design School | 5 | | Prerequisite(s): INT 621 |
| INT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| INT | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| INT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 101 | Elementary Italian I | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 102 | Elementary Italian II | Fundamentals of the language. Emphasizes listening, speaking, reading, writing, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 110 | Intensive Italian I | Proficiency-oriented language course designed to achieve the maximum level of proficiency in an intensive and dynamic communicative environment. Class time is spent on a variety of fast-paced communicative activities focused especially on the development of speaking skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| ITA | 111 | Accelerated Elementary Italian | Accelerated elementary Italian for experienced language learners. Emphasizes reading, writing, listening, speaking, and cultural proficiency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| ITA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| ITA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 201 | Intermediate Italian I | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on both spoken and written genres of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 202 | Intermediate Italian II | Emphasizes reading, writing, listening, and speaking proficiency at an intermediate level. Focuses on values of Italian culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | |
| ITA | 210 | Intensive Italian II | Proficiency-oriented language course designed to achieve the maximum level of proficiency in an intensive and dynamic communicative environment. Class time is spent on a variety of fast-paced communicative activities focused especially on the development of speaking skills. Class meets four times a week. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): ITA 102 or 110 or 111 with C or better |
| ITA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 311 | Italian Conversation | Engages students in different oral/aural activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 202 with C or better |
| ITA | 312 | Italian Composition | Engages students in different written activities to reach an advanced proficiency level. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & G | Pre-requisites: ITA 202 with C or better |
| ITA | 315 | Italian Civilization | Students read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 202 with C or better |
| ITA | 319 | Italian for Professions | Read and analyze texts and artifacts that represent important cultural and political movements of Italian civilization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ITA 202 with C or better |
| ITA | 321 | Introduction to Italian Literature I | Studies the development of early Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 322 | Introduction to Italian Literature II | Studies the development of modern and contemporary Italian language, literature, and culture through reading, discussion, and writing activities in Italian. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 202 with C or better |
| ITA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 413 | Advanced Italian | Development and assessment of advanced spoken and written Italian proficiency through activities using all four skills. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: ITA 311 or 312 with C or better |
| ITA | 420 | Italian Cinema | Major trends of Italian cinema from the post-war period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| ITA | 430 | Italian Literature of the Middle Ages | Emphasizes Stii Novo, Dante's minor works, Petrarach, and Boccaccio. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 441 | Dante: Divina Commedia | Critical reading of the three Cantiche (Inferno, Purgatorio, and Paradiso). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 443 | Italian Literature of the Renaissance | Emphasizes Lorenzo de'Medici, Poliziano Castiglione, Machiavelli, Ariosto, and Tasso. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Pre-requisites: ITA 321 or 322 with C or better |

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| ITA | 449 | 20th-Century Italian Literature | Major works, figures, and movements of contemporary Italian literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: ITA 321 or 322 with C or better |
| ITA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ITA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| ITA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| ITA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ITA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ITA | 550 | Italian for Reading Knowledge | Teaches non-speakers of foreign language, or those with only basic notions of the language, how to read in a foreign language at an advanced level. Consists of a concise overview of grammar as well as reading comprehension practice for students who plan to take the Graduate Foreign Language Exam or others who would merely like to learn to read in a foreign language. Focuses only on reading and not on listening, speaking or writing as in a traditional language course. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ITA 494 (Italian for Reading Knowledge) or ITA 550 |
| ITA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 594 | Conf And Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| ITA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JAC | 101 | Intermediate Algebra with the Maricopa County Community College District | JAC 101 is a non-credit placeholder that will facilitate enrollment in MAT 122: Intermediate Algebra offered on the ASU campus by the Maricopa Community College District. JAC 101 will display on transcripts, class schedules, and billing statements. Upon completion of the Intermediate Algebra course, MCCCDC will automatically submit transcripts for the MAT 122 course to ASU for students enrolled in this partnership. Students will be charged ASU and MCCCDC tuition and fees on their ASU billing statement. Students will submit payment for all courses directly to ASU. | N | LEC | Y | Z1 | Office of the Provost | Arizona State University | 0 | | |
| JHR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 501 | Proseminar in Social Justice and Human Rights | Classical and contemporary theories of social justice and human rights in the context of current local, national, and international issues. Special reference made to the roles of both governmental and nongovernmental organizations in addressing social justice and human rights issues. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 506 | Grant Writing for Social Justice and Human Rights | Seminar in grant writing and fund raising for social justice and human rights. Provide an introduction to the grassroots grant writing and fund raising process, with a particular focus on justice-oriented nonprofit and international nongovernmental organizations. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 510 | Problem-Based Seminar in Social Justice and Human Rights | Interdisciplinary seminar examines current problems in social justice and human rights from several different theoretical and analytical viewpoints. May be repeated once for credit. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 511 | Community-Embedded Seminar in Social Justice and Human Rights | Interdisciplinary seminar requiring students to be placed in community organizations dealing with the course issue during the semester. Emphasizes developing effective strategies for partnerships with relevant community organizations and evaluating institutional settings, policies, and procedures from the perspective of social justice and human rights. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |

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| JHR | 525 | Action Research in Social Justice and Human Rights | Advanced practicum in engaged, community-embedded research and interpretive analysis. Gives students experience in the practice of engaged fieldwork as well as the writing it generates. | N | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Social Justice & Human Rights MA student |
| JHR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JHR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JMC | 101 | Grammar for Journalists | Grammar course specifically designed to help journalism majors master the essentials of grammar. All majors must achieve an 80 percent in the course, indicating a mastery of grammar, before they can move on to any other journalism course. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major |
| JMC | 105 | Freshman Seminar | Exploring the impact of technology on the profession of journalism during the last 20 years. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Credit is allowed for only JMC 105 or 194 (Freshman Seminar) |
| JMC | 110 | Principles and History of Journalism | Fundamental principles of journalism and the evolution of those principles through the history of the U.S. news media. By understanding the history of journalism, students learn about the most critical values of the profession. This is the first of four "values" courses Cronkite students take during the four-year curriculum. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; Credit is allowed for only JMC 110 or MCO 120 |
| JMC | 120 | Studio Production | Introduces the vocabulary of production. Develops familiarity with the studio equipment, its care and operation, and basic production procedures. Covers the ability to function as a member of a production team; sound attitudes toward assignments and constructive criticism; and an appreciation of production as a tool of the communication process. Discusses career opportunities in the diverse marketplace. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication major; Credit is allowed for only JMC 120 or 194 (Studio Production) |
| JMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major |
| JMC | 201 | News Reporting and Writing | Introductory news writing course required for all Cronkite majors. Students learn the basic reporting and writing skills needed for further study in print, broadcasting, online or public relations. Students practice reporting and writing news stories with an emphasis on accuracy, newsworthiness, deadlines, objectivity and fairness. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; ENG 101, 105, or 107 with C or better; JMC 101; JMC 110 or MCO 120 with C or better |

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| JMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major |
| JMC | 301 | Intermediate Reporting and Writing | Required of all students specializing in print, online and public relations; trains students in news reporting and writing under deadline. Students produce professional-level stories that are clear, well reported and accurate for publication. Students hone their reporting techniques and learn how to cover a beat and write news, feature and enterprise stories. They gain a deeper and more sophisticated understanding of newsworthiness, journalism ethics and law and news diversity. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): Journalism and Mass Communication major; ENG 102 or 105 or 108 with C or better; JMC 201 with C or better; minimum 2.50 cumulative GPA |
| JMC | 302 | Sports Reporting | Students learn how to cover a sports beat in this hands-on class. They develop story ideas and sources and report and write multiple stories on deadline. Expects students to pitch stories to professional outlets with the goal of publication. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 305 | Multimedia Journalism | Software and digital tools commonly used by multimedia journalists, including shooting and editing photos and video, social media, Web analytics, basic HTML, blogging, and design for the Web. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; ENG 101 or 105 or 107 with C or better; JMC 101; JMC 110 or MCO 120 with C or better |
| JMC | 310 | Public Relations | Theory and practice of publicity, public relations and related techniques and procedures. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 201 with C or better; minimum 2.50 cumulative GPA |
| JMC | 313 | Introduction to Editing | Hands-on training in editing copy, photos and graphics and writing headlines and other display text for print and digital platforms. Emphasizes editing for accuracy, clarity, brevity, grammar and tone. Students practice AP style, develop news judgment and consider the ethical implications of their work. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 201 with C or better |
| JMC | 315 | Intermediate Reporting and Writing (Broadcast) | Intermediate broadcast news reporting and writing techniques with emphasis on audio. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | L | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 cumulative GPA; ENG 102 or 105 or 108 with C or better; JMC 201 with C or better |
| JMC | 320 | Newscast Producing | Principles of broadcast news producing, delivered via a combined lecture/lab experience and assignments based on editorial judgment, technical skills and industry awareness. Students emerge with strategies for total newsroom management, confidence in producing news content and newscasts under deadline pressure and prepared for a variety of producer-related roles in professional newsroom environments. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 302 or JMC 315 with C or better; minimum 2.50 GPA |
| JMC | 325 | Breaking News Multimedia Reporting | Students cover breaking news for azcentral.com, gaining practical experience in an online, multimedia environment. Students work out of a Republic Media newsroom under the direction of professional editors. Students often have the opportunity to work with full-time professional reporters on big news stories, and their work may appear on azcentral.com, in The Arizona Republic and in 12 News reports. Students must commit to two full days a week, and they earn pay in addition to class credit. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 GPA; JMC 305 with C or better |
| JMC | 330 | Television Reporting | Writing, reporting and editing for television. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 315 and JMC 345 with C or better |
| JMC | 331 | Television Sports Reporting | Hands-on experience reporting and producing television sports packages. Skills taught include sports writing, reporting and editing for broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 302 with C or better; JMC 346 with C or better; minimum cumulative 2.50 GPA |
| JMC | 345 | Videography | Students conceive, plan, shoot, write and edit television news packages in this hands-on class. Skills taught include sequencing, framing, lighting, sound, story structure, news judgment, storytelling and editing. Students may use school-supplied cameras and editing facilities but must provide a Flash Memory card and portable external FireWire Hard Drive. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 201 with C or better; minimum 2.50 cumulative GPA |
| JMC | 346 | Sports Videography | Develops an understanding of visual sports storytelling and craft compelling sports stories using video and sound. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 351 | Photojournalism I | Teaches basic skills required to compose, shoot and prepare still photos for publication. Hands-on, with students shooting a range of assignments from news events to environmental portraits, and producing a portfolio of their work. Students may share a school-supplied Canon camera or provide their own. The camera should be a digital SLR camera body with at least a kit zoom lens, and the camera body must have a manual setting and have the ability to turn off any built-in camera flash. Students need digital media cards of at least 2 GB and an external digital card reader. Students may not use point-and-shoot cameras or cameras with Flash (built-in or external) for this class. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 201 with C or better; minimum 2.50 cumulative GPA; successful completion of the English Grammar Test administered by the Cronkite School (or JMC 101 or JMC 194 - Grammar for Journalists) |

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|---------|-------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMC | 352 | Sports Photojournalism | Students learn photojournalism skills, including composition, shooting and preparing still photos for publication in a sports context. Hands-on, with students shooting a range of sports assignments and producing a portfolio of their work. Students may share a school-supplied Canon camera or provide their own. The camera should be a digital SLR camera body with at least a kit zoom lens, and the camera body must have a manual setting and have the ability to turn off any built-in camera flash. Students need digital media cards of at least 2 GB and an external digital card reader. Students may not use point-and-shoot cameras or cameras with flash (built-in or external) for this class. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 GPA |
| JMC | 366 | Journalism Ethics and Diversity | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 110 with C or better; minimum 2.50 cumulative GPA; minimum 25 hours |
| JMC | 367 | Ethics and Diversity in Sports Journalism | Explores ethical problems related to sports media in a seminar setting. Discussion-based course applies journalistic values and principles to contemporary ethical dilemmas in sports media and helps prepare students for work in the profession. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; minimum 2.50 GPA; JMC 101; JMC 110 with C or better |
| JMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisites: JMC student; Minimum 2.50 GPA; JMC 300, JMC 315, TCM 300 or TCM 315 with C or better |
| JMC | 402 | Mass Communication Law | Provides a grounding in the laws and regulations that govern various aspects of the media with a focus on First Amendment guarantees and privileges and the extent to which those have been limited by courts and lawmakers. Topics include freedom of expression, libel, privacy and obscenity. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; ENG 102, 105, or 108 with C or better; JMC 201 with C or better; minimum 2.50 cumulative GPA; minimum 56 hours |
| JMC | 410 | Turning Points in TV History | Uses historic television footage to talk about the evolution of news coverage and the ethical decisions journalists face. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 101 (or successful completion of English Grammar Exam); Credit is allowed for only JMC 410 or 494 (Turning Points in TV History) |
| JMC | 412 | Opinion Writing | Provides hands-on experience writing and editing opinion and first-person narratives for ASU-affiliated Zocalo Public Square, an innovative LA-based publication syndicated by more than 100 publications nationwide including Time, The Washington Post, the San Francisco Chronicle and Gannett newspapers. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 with C or better; minimum 2.50 cumulative GPA |
| JMC | 413 | Advanced Editing | Builds on skills learned earlier. Students master editing skills that include AP style, grammar, headline writing and page layout as well as editing graphics and other visuals, editing Web content and uses of social media. Students hone their news judgment and learn to work quickly and accurately on deadline. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 313 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 414 | Graphic Design for Print and Web | Theory, organization, and practice of layout, typography, and design in traditional and multimedia publishing. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 305 with C or better; minimum 2.50 cumulative GPA |
| JMC | 415 | Writing for Public Relations | Develops the professional-level writing and strategic skills expected of public relations practitioners. Students learn how to design and produce strategic plans, news releases, media kits and executive communications. They are exposed to communications approaches required for different audiences and media and learn about public relations theory as well as audience research and analysis. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; JMC 270 or JMC 310 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 417 | Public Relations Campaigns | Students work with professional clients in an agency setting to research, plan and create comprehensive public relations campaign that address clients' needs. Concepts, theories and techniques relevant to public relations campaigns as well as strategic planning, campaign components and technology resources and tools. Analyzes, discusses and responds to current public relations issues and case studies. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): JMC 415 with C or better; JMC 436 or 494 (Public Relations Research) with C or better; Minimum 2.50 GPA OR graduate Mass Communications major |
| JMC | 420 | Reporting Public Affairs | Instruction and assignments in reporting the courts, schools, government, city hall, social problems, and other areas involving public issues. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student, JMC 301 with C or better; Minimum 2.5 GPA OR Graduate Mass Communication student |
| JMC | 430 | Sports Marketing and Campaigns | Creates a professional campaign engaging viewers and fans in new and meaningful ways solidifying Fox Sports Network's (FSN) position as a leader in sports programming. Students work within FSN's "Creative University" program to execute the campaign; FSN selects a campaign to implement. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; minimum 2.50 GPA; Credit is allowed for only JMC 430 or JMC 494 (Sports Marketing and Campaigns) |

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|---------|-------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|--------------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMC | 435 | Latino and Transnational Issues | Provides background and understanding of some of the most pressing and controversial issues of the day that are taking place in the Southwest borderlands. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 201 with C or better; minimum 2.50 cumulative GPA; Credit is allowed for only JMC 435 or JMC 494 (Latino and Transnational Issues) |
| JMC | 436 | Public Relations Research | Students learn about the importance of research in communications, conduct research using qualitative and quantitative methods, and analyze data to understand implications within a specific communications context. They also critically evaluate published academic and professional research and are exposed to types of research and their application in the field of public relations. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 and 310 with C or better; Credit is allowed for only JMC 436 or 494 (Public Relations Research) |
| JMC | 437 | Documentary Production | Students learn the fundamentals of producing documentaries, including research, script writing, production and shooting and editing video. Students produce a long-form documentary. Students become familiar with television documentary history in order to identify trends and learn about legal and ethical issues relevant to video documentary production. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 345 or JMC 346 with C or better; minimum 2.50 GPA |
| JMC | 440 | Magazine Writing | Students report and write stories suitable for magazine outlets. They develop and pitch stories, learn new reporting techniques and employ literary techniques such as description and scene setting in their writing. See class notes for additional information. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.5 GPA OR graduate Mass Communication student |
| JMC | 445 | Science and Medical Writing | Develops writing, reporting, and an understanding of key concepts in science as they relate to medical science research and practice. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: JMC student; JMC 301 with C or better; Minimum 2.50 GPA OR Graduate Mass Communication student |
| JMC | 450 | Issues in Coverage of Business and the Economy | Basics of business and economic reporting, one of the fastest-growing areas of journalism. Students learn what skills are needed to cover business and economic stories as well as the basics of how private companies operate and the factors that drive the economy. Students learn about opportunities in the field and hear from leaders in business journalism. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 201 with C or better; Credit is allowed for only JMC 450 or 494 (Issues in Coverage Bus/Economy) |
| JMC | 451 | Photojournalism II | Develops photojournalism and visual storytelling skills through extensive hands-on practice shooting and editing for online and print media. Introduces shooting video with DSLR cameras and becoming proficient at image cropping, writing cutlines and editing using Adobe Photoshop. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 305 with C or better; JMC 351 with C or better; minimum 2.50 cumulative GPA |
| JMC | 452 | Visual Storytelling | Develops visual storytelling skills, working closely with a professional visual journalist to tell multimedia documentary stories that utilize video, still photos and text. In addition to the basics of storytelling, covers non-traditional techniques, including time-lapse, panos, HDR and star trails. Students should have basic skills in both still photography and videography and are expected to provide their own DSLR camera that can accommodate external mics and that have video capability. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA; JMC 345 or JMC 351 with C or better |
| JMC | 453 | Reporting on Business and the Economy | Trains in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; Minimum 2.50 GPA; JMC 301 (or 315) and JMC 450 with C or better; Credit is allowed for only JMC 453 or 494 (Reporting on Business/Economy) |
| JMC | 455 | Digital Media Entrepreneurship | Students identify a marketable idea and transform it into a product and/or company. In the process, they learn about key concepts of entrepreneurship and practice skills that they can employ as entrepreneurs themselves. Students are exposed to a range of national and regional entrepreneurs and emerge with a deeper understanding of entrepreneurship's importance within the media and communications landscape. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 GPA; JMC 305 with C or better; Credit is allowed for only JMC 455, JMC 494 (Digital Media Entrepreneurship), MCO 555, or MCO 598 (Digital Media Entrepreneurship) |
| JMC | 460 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an award-winning online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 305 with C or better; minimum 2.50 cumulative GPA |
| JMC | 465 | Telling Stories with Data | Techniques and tools of reporting using data and public records as well as how to use the Internet and other online sources to find information and sources for stories. Students get experience with computer spreadsheets, database software and statistical techniques as they develop their advanced reporting skills. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; minimum 2.50 GPA |

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| JMC | 470 | Depth Reporting | Teaches students how to conceptualize, report and write long-form, in-depth stories. Students deeply research a selected topic through public records, interviews and investigative reporting techniques and write an in-depth article with the goal of publication. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 cumulative GPA; JMC 301 or 302 or 315 with C or better |
| JMC | 473 | The Business and Future of Journalism | Exposes advanced journalism students to broad media management problems; helps students understand how essential the bottom-line and quality journalism are to the entire journalistic enterprise; helps students think about how to balance those two concerns. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism student; minimum cumulative GPA of 2.5; JMC 201 with C or better |
| JMC | 474 | Advanced Issues in 21st-Century Sports and Media | Exposes challenges facing sports and media in the 21st century, including changing content models, revenue streams, and the evolving relationship between teams and media outlets. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism major; JMC 201 with C or better; minimum 2.50 cumulative GPA |
| JMC | 475 | Cronkite News: Broadcast | Students increase their knowledge of the television and multimedia news industry and receive a realistic experience in field and studio newscast production. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 330 or 331 with C or better; minimum 2.50 cumulative GPA |
| JMC | 476 | Public Relations Laboratory | Synthesizes and applies the theories, principles and techniques of public relations. This body of knowledge includes research, planning techniques, types of budgets, organizational systems, management styles, campaign components, types of campaigns, technology, ethics, diverse channels of communication and target audiences. Students: (1) analyze, discuss, then respond to public relations case studies; (2) develop an in-depth understanding of a client's needs; (3) conduct primary and secondary research; (4) work with a client in a team-based approach to prepare a comprehensive campaign proposal to address the client's problem or issue; (5) design and develop media products for client; (6) formally present the proposal to the client and the class. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; 2.50 cumulative GPA; JMC 417 with C or better. Credit is allowed for only JMC 476 or JMC 498 (Public Relations Lab) |
| JMC | 477 | New Media Innovation and Entrepreneurship Lab | Research and development program designed to help media companies create new and exciting multimedia products and to help students create digital media startups. Brings together students from disciplines across campus, including journalism, business, computer engineering and design. Journalism students conduct research into developing new products and creating prototypes for those products. Students learn by doing, interacting with clients or investors, the director and the lead Web developer. Students schedule meeting times with the director to discuss projects. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 or JMC 315 and 305 with C or better; 2.50 cumulative GPA. Credit is allowed for only JMC 477 or JMC 498 (Innovation and Entrepreneurship Lab) |
| JMC | 478 | Cronkite News: Phoenix Bureau | Applies and enhances reporting, writing and multimedia skills. | N | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; 2.50 cumulative GPA; ¶ JMC 301 or JMC 315 with C or better |
| JMC | 479 | Cronkite News: Washington Bureau | Students participate in a full-time regional reporting bureau that gives them the opportunity to work as a Washington correspondent. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 or 315 with C or better; minimum 2.50 cumulative GPA; Credit is allowed for only JMC 479 or JMC 478 (Cronkite News - Washington Bureau) |
| JMC | 480 | Cronkite News: Phoenix Sports Bureau | Students gain valuable experience in sports reporting, shooting, editing and voicing packages for partnership outlets. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301, 302, or 315 with C or better; JMC 305 with C or better; minimum 2.50 GPA; Credit is allowed for only JMC 480 or JMC 478 (Cronkite News - Phoenix Sports Bureau) |
| JMC | 481 | Cronkite News: Los Angeles Sports Bureau | Students gain valuable experience in sports journalism reporting, shooting, editing and voicing packages for partnership outlets. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 330 or 331 with C or better; minimum 2.50 GPA; Credit is allowed for only JMC 481 or JMC 478 (Cronkite News - L.A. Sports) or JMC 478 (Sports Journalism Santa Monica) |
| JMC | 483 | Cronkite News: Digital Production | Students produce stories and multimedia across platforms for Cronkite News and professional news outlets. | N | LEL | Y | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; JMC 305 with C or better; minimum 2.50 cumulative GPA; Credit is allowed for only JMC 483 or JMC 478 (Cronkite News Digital Production) |
| JMC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; JMC 301 or 302 or 315 with C or better; JMC 305 with C or better; minimum 2.50 GPA |
| JMC | 485 | Public Insight Network Bureau | Community engagement, story development, collaboration and entrepreneurship. Opportunity to build relationships with journalists in different markets and across media. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; JMC 301 or 315 with C or better; JMC 305 with C or better; minimum cumulative 2.50 GPA; Credit is allowed for only JMC 485 or JMC 494 (Public Insight Network) |

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| JMC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| JMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism major; minimum 2.50 cumulative GPA OR graduate Mass Communication student |
| JMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | Pre-requisites: JMC student; Minimum 2.25 GPA; Successful completion of English proficiency exam OR Graduate Mass Communication student |
| JMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-3 | | |
| JPN | 101 | First-Year Japanese I | Basic speaking, listening, reading, writing, computer skills, and culture. Hiragana, katakana, 75 kanji. For students without previous Japanese instruction. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| JPN | 102 | First-Year Japanese II | Continued development of JPN 101 skills. 99 additional kanji. Communication skills goal: ACTFL Guideline Novice-Mid to Novice-High. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 101 with a C or greater or in progress. Students may not take JPN 102 if they have received credit for JPN 201, 202, 309, 310, 311, 312, 313, 314 or 321 |
| JPN | 110 | Intensive Japanese I | First semester of the one-year intensive Japanese language sequence designed to train novice-level speakers to become competent intermediate speakers who can carry out conversation on familiar topics or handle straightforward situations. Emphasizes both oral and written communication through development of skills in listening, speaking, reading, writing and cultural awareness. Students manage a number of communicative tasks in social situations. Conversations are restricted to a few of the predictable topics necessary for survival; students express themselves in straightforward situations and on familiar topics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| JPN | 115 | Japanese Popular Culture: Anime, Manga, and Film | Examines different media of Japanese popular culture such as comics (manga), animation (anime) and film for evidence of how the Japanese express their self identity in Japanese society. By separating the media into themes such as technology and the future, war/apocalypse/disaster, violence in society, gender and sexuality, and human relations, understands the Japanese culture (and social consciousness) more intimately. Students view films, read scholarly articles on the subject matter, and actively participate in the course through written papers and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Credit is allowed for only JPN 115 or 194 (Japanese Popular Culture: Anime, Manga, and Film) |
| JPN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| JPN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 201 | Second-Year Japanese I | Continued development in speaking, listening, reading, writing, culture, and computer skills. 74 additional kanji. Introduction to kanji dictionary. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: JPN 102 with C or better; Students with credit for JPN 202, 309, 310, 311, 312, 313, 314 or 321 may not enroll in JPN 201 |
| JPN | 202 | Second-Year Japanese II | Continued development of JPN 201 skills. 116 additional kanji. Communication skills goal: ACTFL Guideline Intermediate-Low to Intermediate-Mid. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: JPN 201 with C or better |
| JPN | 206 | Japanese Calligraphy | Introduces Japanese calligraphy using traditional implements, starting with basic brush strokes and stroke order for kanji and kana. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Pre-requisites: JPN 101 with C or better |
| JPN | 210 | Intensive Japanese II | Second semester of the one-year intensive Japanese language sequence designed to train novice-level speakers to become competent intermediate speakers who can carry out conversation on familiar topics or handle straightforward situations. Emphasizes both oral and written communication through development of skills in listening, speaking, reading, writing and cultural awareness. Students manage a number of communicative tasks in social situations. Conversations are restricted to a few of the predictable topics necessary for survival; students express themselves in straightforward situations and on familiar topics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): JPN 110 with C or better |
| JPN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| JPN | 301 | Third-Year Japanese I | Development of reading skills, using authentic materials to comprehend structure, grammar, idioms, and culture. Expansion of kanji and vocabulary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: JPN 202 with C or better |
| JPN | 302 | Third-Year Japanese II | Continued development of reading skills, as in JPN 301. Reading proficiency goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 301 with C or better |
| JPN | 309 | Japanese Oral Communication I | Development of interpersonal, interpretive, and presentational oral/aural skills in familiar topics with sociolinguistic skills and understanding of Japanese culture. JPN 309 and 310 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 202 with C or better |
| JPN | 310 | Japanese Oral Communication II | Continued development of oral/aural skills, with increased emphasis on honorifics. Speaking proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 309 with C or better |
| JPN | 311 | Japanese Composition I | Learning structural guidelines for narrative writing, developing organization skills to support ideas. Writing proficiency outcome goal: ACTFL Guideline Intermediate-High. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 202 with C or better |
| JPN | 312 | Japanese Composition II | Continued development of writing skills, introducing research and creative writing. Writing proficiency goal: ACTFL Guideline Intermediate-high to Advanced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: JPN 311 with C or better |
| JPN | 315 | The Language of Japanese Popular Culture I: Gender and Onomatopoeia/Mimesis | Develops reading and listening skills using Japanese popular culture materials of various genres, including narratives, comics, anime, film and music. Introduces linguistic elements that are not found in regular language textbooks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre- or corequisite(s): JPN 202 with C or better if completed; Credit is allowed for only JPN 315 or JPN 394 (The Language of Japanese Popular Culture I) |
| JPN | 316 | The Language of Japanese Popular Culture II: Honorifics and Dialects | Understands Japanese popular culture materials such as anime, music, movies, manga and narratives through their target language of Japanese. Emphasized language areas are honorifics, formal expressions, dialects and slang and vulgar expressions that are tolerable in the classroom environment. Introduces elements of the history, geography and culture of Japan to further students' understanding of the materials. Students improve their receptive skills, i.e., listening and reading, by engaging with these materials, and through the technique of shadowing, also improve their pronunciation, intonation and grammatical accuracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre- or corequisite(s): JPN 301 with C or better if completed; Credit is allowed for only JPN 316 or JPN 394 (The Language of Japanese Popular Culture II) |
| JPN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 401 | Reading Modern Japanese Texts I | Readings in modern literary and expository texts. Focus varies from year to year. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: JPN 302 and SLC 202 with C+ or better |
| JPN | 414 | Introduction to Classical Japanese | Readings from various genres of pre-20th-century literature, with analysis of the structure of the classical language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 302 with C or better |
| JPN | 415 | Advanced Classical Japanese | Close readings of selected premodern texts, with focus on grammatical and stylistic features. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 414 with C or better |
| JPN | 445 | Readings in Modern Japanese Letters and Culture | Advanced study of selected facets of modern Japanese letters and culture, including literature, material and visual culture, film, and other media. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 202 with C or better. Credit is allowed for only JPN 445 or 535 |
| JPN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| JPN | 485 | Literary Translation: Theory and Practice | Introduces theories and practice of literary translation, with an emphasis on the translation of Japanese literary texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: JPN 401 and SLC 421 with C or better. Credit is allowed for only JPN 485 or 585 |
| JPN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| JPN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JPN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| JPN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| JPN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| JPN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 535 | Advanced Readings | Readings in primary and secondary sources in history, art, religious studies, literature, or other fields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 445 or 535 |
| JPN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JPN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 585 | Advanced Problems of Translation | Theories and practice of translation; strategies for handling a variety of Japanese texts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only JPN 485 or 585 |
| JPN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JPN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JST | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |
| JST | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| JST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only JST 210 or REL 210 |
| JST | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |
| JST | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |

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| JST | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| JST | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extra-biblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| JST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 304 | Studies in European History | Specialized topics in European history. Explores countries, cultures, and issues in history, and their interpretation in historical scholarship. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 30 hours; Credit is allowed for only HST 304 or JST 304 |
| JST | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JST | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| JST | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| JST | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| JST | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 317 |
| JST | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| JST | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only HEB 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| JST | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better. Credit is allowed for only HEB 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| JST | 373 | Women in Judaism | Studies the legal, social and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better and minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| JST | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| JST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST or REL 396 |
| JST | 411 | Judaism and the Beginnings of Christianity | Studies the beginnings of Christianity in relation to Judaism: their common context, the process of their distinction and their mutual influence. Through a historical and thematic approach, explores the parallel construction of Jewish and Christian identities. Combines readings from primary sources (Hellenistic Judaism, Qumran, New Testament, Early Christianity, Rabbinic Judaism) and up-to-date scholarly literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 or 105 or 107 or 108 or HST 100 or 102 or REL 100 or SLC 142 or 202 with C or better; Credit is allowed for only HEB/JST/REL 411 or HEB 394 (Judaism and the Origins of Christianity) or HEB 494 (Judeo-Hellenistic Literature) |

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| JST | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| JST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| JST | 490 | Methods of Historical Inquiry | Capstone course in history as an academic discipline, including formulation of research questions, use of primary and secondary sources to evaluate, form and support historical arguments. Students draft and revise a scholarly research paper. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Prerequisite(s): History or Secondary Education (History) student; ENG 102, 105, or 108 with C or better; minimum 55 hours; Credit is allowed for only HST 300 or HST 495 or JST 490 |
| JST | 491 | History of Anti-Semitism | Anti-Semitism means hostility, negative perceptions, and persecution of Jews. Examines the evolution of anti-Semitism in the West from antiquity to modern times. Explains the history of anti-Semitism by looking at the interplay of religious, economic, cultural, and political factors. Special attention given to the origins of Christianity, the place of Judaism in Christian self-understanding, the power struggle between popes and emperors during the Middle Ages, the involvement of Jews in money lending, the alliance between the Jews and the secular princes, the rise of modern nationalism, and the place of racism in the politics of modern nation states. With a better understanding of the history of anti-Semitism, ponders the differences and similarities between premodern anti-Judaism and modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 230 (or REL 210) with C or better |
| JST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| JST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| JST | 495 | Judaism, Science and World Religions | Studies the correlation between science and religion as an interdisciplinary study from a historical perspective. Session topics fall into three distinct units. The first correlates the physical sciences with Western religious theology; the second explores the consequences of the life sciences on religious psychology; and the third examines the impact of the interconnection between sciences and religions in society. Each unit is studied through specific readings, film, lectures, and discussion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 496 | Biblical Narratives: Literary Approaches | Presents different trends in synchronic approaches applied to the Bible such as narrative criticism, semiotics, reader-response criticism, and situates them both in the postmodern cultural context and in the history of biblical exegesis. Explores various literary devices in biblical narratives, such as repetition, type-scenes, characterization, the change of points of view, the use of metaphors. Studies each technique on particular biblical texts, literally translated into English, with a special emphasis on how these techniques guide the interpretation and create meaning. Questions the significance of literary approaches for religious or ideological texts, such as the Hebrew Bible. Also considers criticisms raised against these approaches, assesses their limits, and envisions their future. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 87 hours; ENG 102, 105 or 108 with C or better; JST 210 or REL 210 (or JST 230) with C or better |
| JST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |
| JST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| JUS | 105 | Introduction to Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for freshmen and sophomores. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 105 or 305 |

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| JUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must have less than or equal to 25 earned hours |
| JUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: Must have less than or equal to 25 hours |
| JUS | 200 | Topics in Concepts and Issues of Justice | Uses critical thinking skills to analyze and comprehend controversial social issues (e.g., abortion, affirmative action, capital punishment, the flat tax, and immigration). | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 207 | Homicide and Serial Killers | Explores the scholarship, research and rational analysis of the mass, spree and serial killer. It will examine some of the causes and underpinnings of these killers within the U.S. as well as the major theories and understandings of this phenomenon. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| JUS | 214 | The Pursuit of Justice in the 21st Century | Introduces a wide variety of institutions and organizations--locally, nationally and internationally--that seek justice. Provides an understanding of the many ways justice is institutionalized in modern societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | |
| JUS | 215 | Bob Marley and Reggae: Lyrics of Resistance | Studies political content, influence, and impact of Caribbean popular music, in particular the music of Bob Marley. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Credit is allowed for only AFR 215 or AFR 394 (Bob Marley: Reggae and Resistance) or JUS 215 |
| JUS | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| JUS | 222 | Drugs and Justice | Provides an historical overview of the development and circulation of certain drugs; explores the more specific effects of drug use and abuse in everyday life; and examines the efforts by governments to both restrict/end and facilitate/expand the drug trade. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Credit is allowed for only JUS 200 (Drugs and Justice) or 222 |
| JUS | 225 | Black Movements in America | Survey course on the historical and political development of mass movements by African Americans and Black resistance in the United States. Traces nearly 400 years of Black resistance against injustices and mass struggles for equality and liberation. Topics include the anti-slavery movement, anti-lynching campaign, the Civil Rights movement, the Black Power movement, prison abolitionism, the reproductive justice movement, and movements for economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only AFR 225 (or AFS 225) or JUS 200 (Black Movements in America) or JUS 225 |
| JUS | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| JUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| JUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 300 | Race and Racism in Africa/African Diaspora | Advanced study of the concepts of race and racism and how they manifest themselves in the USA, the Caribbean, and Africa. Examines the construction of race, racism, and race relations in Africa and the African Diaspora as well as practices to challenge ethnicity, racism, and racial oppression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 301 (or AFS 301) or JUS 300 |
| JUS | 301 | Research in Justice Studies | Focuses on developing and evaluating research designs, data collection, and the relationship between validity and reliability. Stresses methods for conducting research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 302 | Statistical Analysis for Justice Studies | Concepts and application of descriptive and inferential statistics, including linear regression, for justice studies research.. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | CS | Prerequisite(s): minimum 2.00 cumulative GPA; minimum 24 hours; ENG 102, 105 or 108 with C or better; MAT 117, 142, 170 or approved MA General Studies course |
| JUS | 303 | Justice Theory | Examines classic and contemporary philosophies and theories of justice, including legal, social, and criminal justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA |
| JUS | 304 | Islands of Globalization: Caribbean Politics and Political Economy | In-depth study of the complexities of contemporary Caribbean politics and political economy. Examines the countries that constitute the Caribbean community and common market and the Caribbean Latin American countries such as Cuba and the Dominican Republic and analyzes the historical evolution of the region's political and economic systems and the impact of globalization. Traces the development of the region's political economy from the colonial period to the present; looks at the impact of globalization on contemporary politics, economics, and culture and the region's response. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 304 (or AFS 304) or JUS 304 |

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| JUS | 305 | Principles of Justice Studies | Introductory overview to the study of justice from a social science perspective. Primary topics include justice theories and justice research. Appropriate for juniors and seniors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 105 or 305 |
| JUS | 308 | Courts and Society | History and development of courts. Relationship between dispute resolution mechanisms and cultural/social structure/processes in which they are embedded. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better, minimum 24 hours; minimum 2.00 GPA |
| JUS | 320 | Community and Social Justice | Discusses and analyzes definitions of community; impact of environment on behavior; promises of community organization for local empowerment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 321 | Wealth Distribution and Poverty | Examines wealth and income distribution in the United States and analyzes ideological and political forces producing an increasingly unequal society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 323 | Justice and the Development of the Welfare State | Provides a comprehensive overview of the development of social welfare and relevant issues pertaining to social justice. Introduces upper-division students to different ideas about the meaning of social welfare in the context of the development of the U.S. welfare state. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA; Credit is allowed for only JUS 325 or SGS 325 |
| JUS | 326 | Music as Political Discourse: Reggae, Calypso, and Hip Hop | This is a reading and writing intensive course that employs critical thought that explores African Diaspora popular music as a medium of social and political expression. It examines the political content of Reggae, Calypso and Hip Hop and their role in triggering and influencing popular discourse in the Caribbean and the USA. Course material will analyze the interrelationships among the musical forms and their role in fostering Black and Pan African Cultural Identity, Political Consciousness and World Peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & H & G | Prerequisite(s): AFR 200 (or AFS 200); minimum 45 hours; Credit is allowed for only AFR 325 (or AFS 325) or JUS 326 |
| JUS | 329 | Domestic Violence | Critical inquiry into the legal, historical, theoretical, comparative, and treatment literatures on domestic violence; application of contemporary justice and social change theories to research how society defines and organizes against domestic violence. May include consideration of intimate partner abuse, child abuse and neglect, and gender violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 330 | Survey of African American Politics | In-depth study of the dynamics of the African American political experience. Examines the historical development of African American politics from the anti-slavery era to the Civil Rights breakthrough of the 1960's through the present political climate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 330 or JUS 330 |
| JUS | 332 | Politics of Energy Policy and Justice | Examines the social and political dimensions that shape energy and environmental policy. Focuses primarily on the U.S. Introduces elements of regional or global policy where they influence or shape domestic politics and policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 335 | Organized Crime | Critical inquiry into organized crime and its illegal activities; analysis and application of contemporary theories; analysis of strategies for reducing the prevalence and power of organized crime in the U.S. and other nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 345 | Peoples and Cultures of the Caribbean | Traces the socio-political history of the wider Caribbean from the 15th century to the present. Focuses on the following broad areas: the early years of European settlement and colonization; the construction of slavery and plantation society; and the transition from colonization to political independence. Critically examines the origins and building blocks of Caribbean society as well as analyzes the linkages between the region and the rest of the African diaspora. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 345 (or AFS 345) or JUS 345 |
| JUS | 347 | Immigration, Education and the Family | Cultural processes related to immigration and their impact on the social construction of the immigrant family and the education of other children. Immigration theories, immigration debates and discourses, the immigration landscape of the 21st century, conceptualizations of the family, and the methodological challenges family researchers face. Topics include issues pertaining to education and the family and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only APA 347, JUS 347, APA 394 (Immigration, Education & Family) or JUS 394 (Immigration, Edu. & Family) |
| JUS | 350 | Immigration and Justice | Examines immigration policy, history of immigration, refugee issues, labor force participation, gender, family, children, social networks, and transnationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 352 | The Global Politics of Human Rights | Examines political forces that have shaped gradual construction of an international human rights regime and a universal culture of rights, including civil and political rights, as well as economic, social, and cultural rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |

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| JUS | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| JUS | 360 | Law and Social Control | Resolution of social issues through the application of law as an agent of social control. Nature, sanctions, and limits of law. Categories of law and schools of jurisprudence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 365 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| JUS | 370 | Cultural Diversity and Justice | Analyzes how cultural diversity challenges and broadens conventional understanding of justice. Examines how cultural beliefs and practices come into conflicts with public law and policy. Assesses the U.S.'s performance on incorporating cultural diversity in its social institutions including education, media, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: 2.00 cumulative GPA; Pre/Co-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours |
| JUS | 374 | The Holocaust, Genocide, and Human Rights | Explores the psychological, social, historical, and political dimensions of the Holocaust and the phenomenon of genocide. Also examines the more recent international cases of genocide along with a discussion and analysis of the Universal Declaration of Human Rights. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 375 | Justice and the Mass Media | Analysis of the impact of mass media and popular culture on social justice issues, including criminal justice. Critical inquiry into portrayals of gender, race, culture and class in mass media and other forms of popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 382 | Justice and Pop Culture | Explores the connections between the production, reproduction, and consumption of popular culture and the resultant impact on issues of justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 385 | Justice and Everyday Life | Justice and injustice in everyday life and how small things can become legal issues. Role of language and interaction in social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better; minimum 24 hours; minimum 2.00 GPA |
| JUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 2.00 GPA; Minimum 24 hours |
| JUS | 405 | Economic Justice | Addresses economic issues and justice implications, including the interplay among economic conditions, race-ethnicity, class, and gender worldwide. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 408 | Comparative Development of the Welfare State | Embodies a multidisciplinary perspective on welfare issues and exposes students to different ideas about justice beyond the United States. Allows them to better understand how and why states organize and deliver justice in different ways. Exposes students to cross-national variation in how history, culture, politics, and economics have shaped the development and content of different types of welfare states. Engages theoretical perspectives from political sociology and political economy concerning the emergence and future fate of these welfare states. Analyzes comparative analysis of three distinctive types of welfare states: Liberal, Conservative, and Social Democratic Welfare States, with particular emphasis on their varying capacity to combine economic efficiency with social justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 410 | Punishment: Logic and Approach | Analyzes forms of punishment, how and why they have changed. Areas include philosophy, history, and social structure of punishment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 414 | Black Political Movements: Pan Africanism to Black Power | In-depth examination of the three defining 20th century political movements in Africa and the African Diaspora (USA, Europe, Latin America and the Caribbean)the Pan Africanist, the Civil Rights and the Black Power movements. A primary course objective is to synthesize a comprehensive understanding of Black/African politics and society from a Diasporan perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G & H | Prerequisite(s): AFR 200 (or AFS 200) or minimum 9 upper-division hours; junior standing; Credit is allowed for only AFR 394 (Black Political Movements) or AFR 414 or JUS 414 |
| JUS | 415 | Gender and International Development | Examines the ways in which international development is gendered as well as women's rights as human rights in both national and international arenas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 420 | Women, Work, and Justice | Examines gender inequality in the workplace, including the nature of women's work, theoretical issues, and models for promoting gender justice at work. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

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| JUS | 421 | Race Ethnicity and Politics in the African Diaspora | Reading and writing intensive course that employs critical thought to look at the competition for political power among different ethnic groups in Africa, the Caribbean and the USA and the implications for political stability, economic development, democratic governance, democratization, nationhood and the empowerment of African and African Diasporan populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): AFR 200 (or AFS 200) and minimum junior standing OR minimum 9 upper-division hours in any classes with the following prefix: AFH, AFS, AFR, APA, JUS, POS, SGS, SOC, WST; Credit is allowed for only AFR 420 or JUS 421 |
| JUS | 422 | Women, Law, and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 422 or WST 422 |
| JUS | 424 | Ethics and Alternative Tourism | Cultural processes related to alternative tourism and their impact on both the tourist and local. Travel, tourism, globalization, development, human rights and the commodification of people and places. Topics include issues pertaining to Western tourism, commodification, race/class/gender and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 36 hours. Credit is allowed for only JUS 424 or JUS 494 (Sex, Drugs and Death) |
| JUS | 425 | Race, Gender, and Justice | Critically examines major theories, research findings, policies, and controversies concerning race, ethnicity, gender, and crime. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 427 | Identity and Justice | Theory of symbolic interaction which provides a vocabulary, observational methodology (i.e., dramaturgy) and a set of grounding concepts that allow students to explore identity in its everyday practices. Explores the transformation and emergence of identities in public discursive spaces and the political impact of identity as it is deployed (invoked) and interpreted (imputed) among interactants in the social world. Establishes the position that identity operates as a central constitutive function in the construction of meaning and, subsequently, our ideas and attitudes about justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only JUS 427 or JUS 494 (Identity & Justice) |
| JUS | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| JUS | 430 | Social Protest, Conflict, and Change | Analyzes historical and contemporary protest movements advocating equality based on race, gender, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 432 | Racial Justice | Racial inequality remains a dominant theme in understanding social, legal, and economic justice in the U.S. today. Explores controversial topics surrounding race and justice. Emphasizes current legal, economic, political, and social conceptual frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 435 | Cinema and Justice | Tracks the conceptualizations of justice that have been and are currently conveyed in film, including but not limited to the relationship between crime and various notions of justice. Other depictions include social issues such as gender, race, or economics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 438 | Human Differences: Dilemmas of Justice | General examination of democracy and human differences that expands into in-depth investigations of (1) racial difference and identity politics; (2) gender and sexual difference in democracy; and (3) cultural difference and the multiculturalism debate. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or HU) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 440 | Prisons, Power and the Punishments of the Past | Examines the history and logics of a "U.S. Penal Democracy," tracing how prisons became the preferred and accepted choice for punishment. Traces how the practices, policies and rationalizations of punishment (physical, psychological and social) have been at the center of U.S. politics beginning in the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 36 hours. Credit is allowed for only JUS 440 or JUS 494 (Prisons, Power and the Punishments of History) |
| JUS | 444 | Environment and Justice | Explores issues of environment and justice. Topics include justice and environmental racism, future generations, nonhuman life, global/non-Western societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 445 | Surveillance and Society | Explore how surveillance technologies alter social life; the complex ways that they interact to produce security, fear, control, and/or vulnerability. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 452 | Justice Issues in Israel and Palestine: The Political is Personal | Explores the justice issues related to the symbolic, historical, geographic, political, economic, religious, social, and cultural meanings of Israel and Palestine. Focuses on how and why the "political" is felt so very personally in everyday life in Israel and Palestine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |

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| JUS | 456 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 36 hours. Credit is allowed for only JUS 456, SOS 456, JUS 394 (Human Rights & Sustainability), or JUS 497 (Seminar in Human Rights) |
| JUS | 460 | Feminism and Justice | Explores feminist thought and critiques traditional political theories. Examines issues of racism, sexuality, and the law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 463 | Discretionary Justice | Use/abuse, key issues/manifestations of discretion in legal system and other societal institutions. Theoretical/empirical linkages between discretion and discrimination, based on race, ethnicity, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 465 | Death Penalty in the United States | Focuses on capital punishment in the United States; explores negotiation of law, politics, morality, public policy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 467 | Terrorism, War, and Justice | Examines the relationship among terrorism, war, and justice. Analyzes terrorism within the larger study of deviance and social control, comparative politics, hegemony, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 468 | Protest, Justice, Law and the Media | Examines research on protests, political deviance, trials/law and justice, and critiques some of the media representations of related ideas. Investigates global social movements, political protests and nascent political trials. Analyzes varied justifications for defining action as diversity, deviance or crime and the reasons for using criminal, civil or alternative (positive) sanctions (especially via indigenous peoples). Explores the encompassing meaning of a political trial. Many people throughout the world find everyday life to be a trial, especially those placed on the margins of globalization. Expands the research on media and trials that usually have been examined narrowly by legal institutions in North America and reinforced by hegemony. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 2.00 GPA; minimum 36 hours; Credit is allowed for only JUS 468 or 494 (Protest, Justice and the Media) |
| JUS | 469 | Political Deviance and the Law | Examines the controversies created by political and deviant behavior, including a critical view of law as an agent of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 470 | Alternative Dispute Resolution | Critical examination of the tenets of alternative dispute resolution movement; exposure to the programs of ADR, including community and court based. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Non-Justice Studies majors with minimum 56 hours and 2.50 GPA OR Prof/capstone undergrad or Justice Studies graduate; Credit is allowed for only REL 482, POS 473, or JUS 473 |
| JUS | 474 | Legislation of Morality | Addresses historical and contemporary issues related to social justice movements, law, and morality in a pluralistic society. Issues include AIDS, burial rights, homosexuality, poverty, prostitution, and racial discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 477 | Youth and Justice | Critical examination of youth-related justice issues, including economic justice, violence against youth, delinquency, and the juvenile justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 479 | Law and Disputing | Critical analysis of the controversies created by disputes, law, and other forms of social control. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| JUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| JUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| JUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Minimum 2.00 GPA |
| JUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |

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| JUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |
| JUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| JUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Social and Cultural Pedagogy MA student, Justice Studies MS or PHD student |
| JUS | 501 | Justice Theory | Theories and philosophies of social, economic, political, and criminal justice. Applies theories to contemporary justice issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 509 | Statistical Problems in Justice Research | Methodological problems of research design and statistical methods specific to justice studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 521 | Qualitative Data Analysis and Evaluation | Analyzes qualitative data, e.g., field notes, in-depth interview transcripts, document analysis, coding, and retrieval with a microcomputer; qualitative evaluation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 542 | American Indian Justice | Provides a broad overview of American Indian and Alaskan Native issues of justice and injustice in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 550 | Gender, Race, and Economic Justice | Provides a critical social scientific perspective on economic issues particularly as they relate to gender, race, and class equality. Examines issues of economic inequalities as they are distributed along the lines of gender and race. Components converge to identify the social justice ramifications of economic policy and economic conditions. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 555 | Migration/Immigration and Justice | Explores the causes and consequences of immigration to the United States and the incorporation of immigrants into the American economy and society. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 560 | Women, Law, and Social Control | Gender issues in the exercise of formal and informal mechanisms of social control, including economic, social, legal factors, both violent and nonviolent. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 570 | Juvenile Delinquency | Study of delinquency, including causation theories. Alternative definitions of delinquency, official statistics, and the critique and analysis of the interaction between social institutions and youth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 575 | Race, Gender, and the Law | Explores the law and social sciences literature on race, ethnicity, gender, and the legal order. Critically assesses the major contemporary theoretical and policy debates and controversies in the field from a variety of disciplinary and interdisciplinary lenses, setting these debates in their historical contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 588 | Justice and the Mass Media | Analyzes the nature and impact of mass media messages about justice concerns for social order. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| JUS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 610 | Law and the Social Sciences | Analyzes the theoretical grounds underlying diverse studies of law and society; creation and administration of law; and jurisprudence and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 620 | Justice Research Methodology | Covers the epistemology of knowledge and method in justice research, history, and philosophy of social science and critical inquiry, as well as perspectives that link these concerns to research strategies. Explores the strengths and weaknesses of introduced methodologies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 500 with C or better |
| JUS | 630 | Data Analysis for Justice Research | Bivariate and multivariate techniques of data analysis and hypothesis testing for justice-related research and use of information and statistical programs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 509 with C or better |
| JUS | 633 | Community Research | Focuses on epistemology, methodology, and the production of knowledge about community and seeks to link theory, methodology, specific research strategies, and social criticism about the conduct of community research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 640 | Theoretical Perspectives on Justice | Analyzes philosophical perspectives of justice; linkages between social science theory and justice constructs; application of justice to social issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student; JUS 501 with C or better |
| JUS | 650 | Advanced Qualitative Data Analysis | Advanced qualitative data collection and analysis techniques, including ethnography, in-depth interviews, field notes, coding, transcribing, content analysis, textual analysis. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Justice Studies MS or PHD student |
| JUS | 656 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only JUS 656 or SOS 656 or JUS 691 (Human Rights & Sustainability) |
| JUS | 660 | Globalization and Economic Justice | Explores the political economy of globalization from a theoretical as well as practical standpoint. Sources used come from a variety of disciplines--sociology, political science, international relations, geography, and economics--all of which contribute unique theoretical and normative tools for analyzing the effect of global forces on economic justice. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student |
| JUS | 669 | Political Trials and Indigenous Justice | Focuses upon research on political trials, deviance, and conceptions of indigenous and contemporary justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| JUS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| JUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 100 | Introduction to Health and Wellness | Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Credit is allowed for only EXW, HSC or KIN 100 |
| KIN | 101 | Introduction to Kinesiology | Introduces the disciplines and professions associated with kinesiology, including an overview of historical and philosophical foundations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 102 | Forager to Couch Potato: The Obesity & Diabetes Epidemics | Overview of factors leading to the global surge in obesity and type 2 diabetes; the historical, cultural, environmental, and anthropological factors impacting genotypes related to the development of obesity and diabetes; social forces leading to a sedentary lifestyle; and options for reengineering environmental and social institutions to increase physical activity. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| KIN | 105 | Physical Education Activity | Beginning instruction in a wide variety of sports such as aerobics, aquatics, racquet sports, physical conditioning, and golf. 3 hours per week. Y grade only. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 110 | Research Analysis Laboratory | Introduces basic research areas in the discipline of kinesiology. Topics may include the following: developmental learning, exercise physiology, exercise psychology, exercise testing, metabolic physiology, motor control, motor learning, research journals and societies, research methods, research writing. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-2 | | Pre-requisite: Pre Sec Ed - Physical Ed, Exercise Sci/Phys Educ or Kinesiology major |
| KIN | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | Prerequisite: maximum 25 hours |
| KIN | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 205 | Physical Education Activity | Intermediate levels. Continuation of KIN 105. 3 hours per week. | Y | LEC | Y | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 290 | Introduction to Evidence Based Practice | Introduces best practices for gathering, interpreting, analyzing, synthesizing and evaluating research within the discipline of kinesiology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Prerequisite: ENG 101, 105 or 107 with C or better; KIN 101 with B or better; ECN 221, JUS 302, POS 401, PSY 230, QBA 221, SOC 390, 395 or STP 226 with C or better; Credit is allowed for only KIN 290 or 294 (Intro Evidence Based Practice) |
| KIN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 310 | Collegiate Sports | Participation in men's or women's intercollegiate competition. May be repeated for 4 hours 1 per year. Y/E grade. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| KIN | 334 | Functional Anatomy and Kinesiology | Muscles, bones, joints, and nerves and how they produce movement. Emphasizes muscle origins, insertions, actions, and innervations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201 (ZOL 201) with C or better; BIO 202 with C or better |
| KIN | 335 | Biomechanics | Basic anatomical and mechanical principles applied to human movement. Emphasizes kinematic and kinetic concepts. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202), PHY 111 with C or better; One of the following courses: MAT 170, 210, 251, 270, 271, or 272 with C or better |
| KIN | 340 | Physiology of Exercise | Physiological mechanisms of acute responses and chronic adaptations to exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; BIO 201 (ZOL 201) and BIO 202 (ZOL 202) with C or better; one of the following courses: CHM 101, 113, 114, 115, 116, 117, or 118 with C or better |
| KIN | 345 | Motor and Developmental Learning | Principles of motor skill acquisition across the life span, focusing on the learner and the learning environment. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 101) with C or better; BIO 201 (ZOL 201) with C or better |
| KIN | 348 | Psychological Skills for Optimal Performance | Applies psychological techniques and their use to improve effectiveness and performance in sport and related areas. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | |
| KIN | 352 | Psychosocial Aspects of Physical Activity | Interrelationships between physical activity and psychosocial variables, including socialization, cultural values, aggression, and motivation. Includes the psychological benefits of physical activity and exercise adherence. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C | Pre-requisites: KIN 101 (KIN 200) with B or better; PGS 101 (PGS 100) with C or better |
| KIN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| KIN | 412 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discussion of injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 with C or better; Credit is allowed for only KIN 412 or 512 |
| KIN | 413 | Qualitative Analysis in Sport Biomechanics | Develops systematic approach for detecting and correcting errors in human performance using anatomical and mechanical principles. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 335 (EPE 335) with C or better |
| KIN | 414 | Electromyographic Kinesiology | Muscular contributions to human movement, muscle mechanics, electrophysiological basis, and practical application of electromyography. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisites: KIN 335 (EPE 335 or PED 335) with C or better; KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 418 | Experimental Neuromechanics | Students experience different quantitative techniques to analyze human movement from a motor control and biomechanical perspective. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): KIN 290; KIN 335; KIN 345; Credit is allowed for only KIN 418 or KIN 494 (Experimental Neuromechanics) |

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| KIN | 421 | Human Motor Control | Focuses on understanding how the human central nervous system controls, regulates, and learns movements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 422 | Motor Control in Special Populations | Discusses principles of motor control theories and related practical applications for certain special developmental populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 423 | Motor Control and Aging | Functional and behavioral changes to the motor control system as humans age, how specifically it impacts motor control and learning. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 345 (EPE 345) with C or better |
| KIN | 437 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 181; MAT 170 and PHY 111 with C or better; Credit is allowed for only BIO 437, 537, KIN 437 or 537; Credit is allowed for only KIN 437 for KIN 494 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 440 | Exercise Biochemistry | Study of bioenergetics and metabolism of cellular (skeletal muscle, heart, and liver) organelles and proteins during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 440 or 532 |
| KIN | 441 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340); Credit is allowed for only KIN 441 or 531 |
| KIN | 442 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with C or better; Credit is allowed for only KIN 442 or 536 |
| KIN | 443 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better; Credit is allowed for only KIN 443 or 533 |
| KIN | 444 | Metabolic Adaptations to Exercise Training | Examines physiologic adaptations to exercise training as they relate to metabolism and tissue functions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 445 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 (EPE 340) with a C or better; Credit is allowed for only KIN 445 or 535 |
| KIN | 446 | Pediatric Obesity | Covers a variety of aspects related to pediatric obesity including the causes and consequences in terms of physiologic, genetic, psychosocial, environmental and economic. Also discusses potential interventions such as behavioral, pharmacologic, surgical and public health and policy. Evidenced-based course where research guides class lectures and discussions. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): EXW 315 or KIN 340; Credit is allowed for only EXW 412 or KIN 446 or EXW 494 (Pediatric Obesity) or KIN 494 (Pediatric Obesity) |
| KIN | 447 | ECG Interpretation | Using ECG data, this course comprehensively investigates cardiac arrhythmias and interactions with therapeutic drugs and exercise. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 340 with C or better; Credit is allowed for only KIN 447 or 547 (or 598 (ECG Interpretation)) |
| KIN | 450 | Biopsychosocial Perspectives on Physical Activity and Health | Uses a biopsychosocial perspective to examine the interrelationships on physical activity and health (physical and mental). | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: KIN 352 (EPE 352) with C or better |
| KIN | 452 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: KIN 352 (EPE 352 or PED 352) with C or better; Credit is allowed for only KIN 452 or 522 |
| KIN | 454 | Motivational Theory in Exercise and Health | Assesses motivational theories relevant to the field of exercise and health psychology. Evaluates research and utilizes the findings to create applied public service announcements targeted toward a specific health issue (e.g., exercise, nutrition, smoking) and a specific population. Assesses students on four group public service announcements and "mini exams" for each unit. Taught in class, online and in a hybrid format. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): KIN 352 with C or better. Credit is allowed for only KIN 454 or KIN 494 (Motivational Theory in Exercise & Health) |
| KIN | 460 | Theory of Strength Training | Research and theories on developing muscular strength; programs for developing muscular strength. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: KIN 340 (EPE 340 or PED 340) with C or better |
| KIN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): minimum 2.00 GPA; Corequisite(s): junior or senior standing |
| KIN | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| KIN | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KIN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Minimum 25 hours |
| KIN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | | Pre-requisites: BS Kinesiology major; Senior standing |
| KIN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |

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| KIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 512 | Biomechanics of the Skeletal System | Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discusses injury mechanisms. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 412 or 512 |
| KIN | 520 | Applied Sport Psychology | Psychological theories and techniques applied to a sport to enhance the performance and personal growth of athletes and coaches. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 448 or 520 |
| KIN | 522 | Exercise Psychology | Contemporary research and theory as related to human behavior and health in an exercise setting. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 452 or 522 |
| KIN | 523 | Motor Control and Aging | Focuses on the functional and behavioral changes to the motor system as humans age and how specifically it impacts motor control and learning. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 530 | Exercise Physiology | Immediate and long-term adaptations to exercise with special reference to training and the role of exercise in cardiovascular health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 531 | Physiology of Women in Sport | Physiological aspects of women engaging in physical activity. Emphasizes factors affecting performance and health throughout life. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 441 or 531 |
| KIN | 532 | Exercise Biochemistry | Understanding the basic biochemical principles and enzyme pathways involved in energy transduction during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 440 or 532 |
| KIN | 533 | Exercise Endocrinology | Discusses current research and theory concerning hormonal changes during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 443 or 533 |
| KIN | 535 | Exercise Physiology for Children and Adolescents | Understanding the influence of physical growth and maturation on the development of the functional capacities of the exercising child. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 445 or 535 |
| KIN | 536 | Fuel Metabolism | Discusses current research concerning the metabolism of carbohydrate, fat, and protein during exercise. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student; Credit is allowed for only KIN 442 or 536 |
| KIN | 537 | Comparative Biomechanics and Motor Control | Guides students to critically evaluate how the physical and mechanical properties of organisms and their environment affect biological tissues, structures, and motor control. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only BIO 437, 537, KIN 437, 494 (Comparative Biomechanics and Motor Control), 537 or 598 (Comparative Biomechanics and Motor Control) |
| KIN | 547 | ECG Interpretation | Comprehensive investigation of the heart rhythm disturbances that occur within the chambers and conducting tissue of the heart. Partitioned into three sections allowing the systematic review of arrhythmias that occur in the atria, AV junction and ventricles of the heart. The material is designed to maximize understanding by analyzing electrocardiogram rhythm strips to reinforce applying the theoretical component of the course. Also uses the application of these theories through laboratory experiences allowing hands-on experience with electrode placement and 12 lead ECG interpretations. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Clinical Exercise Physiology MS or Exercise and Wellness MS student; Credit is allowed for only KIN 447 or KIN 547 or KIN 598 (ECG Interpretation) |
| KIN | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |

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| KIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 598 | Special Topics | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 621 | Motor Learning/Control | Discussion of contemporary research issues in motor learning and control. Includes behavioral and neurophysiological issues. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| KIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| KOR | 101 | First-Year Korean I | Pronunciation, grammar, elementary conversation, and development of basic reading and writing skills, including Han'gul. Lecture, recitation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| KOR | 102 | First-Year Korean II | Continuation of KOR 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisite: KOR 101 |
| KOR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 201 | Second-Year Korean I | Continual development of communication skills. Increased emphasis on reading and writing, vocabulary building, and review of fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 102 |
| KOR | 202 | Second-Year Korean II | Continuation of KOR 201. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: KOR 201 |
| KOR | 250 | Korean Culture and Society | Surveys Korean culture and society, covering history, religious traditions, gender, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| KOR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 313 | Third-Year Korean I | Continued development of ability to communicate orally and in writing. Exposure to a variety of Korean written styles. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 202 |
| KOR | 314 | Third-Year Korean II | Continuation of KOR 313. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: KOR 313 |
| KOR | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| KOR | 347 | Korean Film and Literature | Introduces aspects of Korean history, culture, and society through Korean film and literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | |
| KOR | 350 | Women of Korea | Examines the changing role and status of women in modern Korea in relation to political and cultural changes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | H | |
| KOR | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 353 |
| KOR | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity; Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better; Credit is allowed for only KOR or REL 354 |
| KOR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| KOR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| KOR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| KOR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| KOR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| KOR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| KOR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAA | 345 | Professional Practice Seminar | Landscape architecture practice including contracts, project and office management, liability, licensing, and professional development. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 1 | | Pre-requisites: Landscape Architecture student; Co-requisite: LDE 362 |
| LAA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 252 | Natural Systems | Increases awareness and understanding of the biotic and abiotic systems, processes and factors of our biosphere in order to facilitate sustainable landscape architectural design and applications. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Credit is allowed for only LAP 252 or LTC 294 (Natural Systems) |
| LAP | 354 | Plant Materials | Plants as landscape architectural elements. Emphasizes plant identification and the uses of particular plants in landscape architecture. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture major. Co-requisites: LAA 345; LDE 362; Credit is allowed for only LAP 345 or LTC 494 (Plant Materials) |
| LAP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Landscape Architecture BSLA plan; Co-requisite: LDE 461 |
| LAP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-6 | | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| LAP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LAP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| LAP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 585 | International Field Studies | Organized field study in specified international locations. | N | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485 or 586 or GPH 485 or 585 or LAP 485 or 585 or POR 485 or PUP 485 or 585 |
| LAP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |

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| LAS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | CNV | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 205 | Deep Roots: Latin America | Introduces the diversity of Latin-American traditions through its cultural production. The approach is interdisciplinary (art, architecture, literature, film, theater, business and anthropology). Studies the history and culture of Latin America and its concept of identity and nation through a variety of genres. Focuses on aspects that reveal the complexity of Latin America and in turn provides insights into Latin American culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 206 | Locating Latin America: Interdisciplinary Methods | Methodologies course designed to provide exposure to academic fields and research approaches that intersect in Latin American studies | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 330 | From the Inside: The Latin American Journey | Journeys through a wide variety of genres and critical scholarship in Spanish. Provides a broad exposure to different types of reading and writing. Because the Latin American Studies program is flexible, students must be able to engage with many different types of texts across disciplines. Covers Latin American cultural history from pre-Colombian to the post-modern by exploring different formats and genres around major central themes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 340 | Latin American Women Writers | In the 20th and 21st centuries, Latin America has seen a proliferation of literature published by women authors. While this explosion of the written word owes in part to changing socio-economic factors and the opening of the international markets, Latin American women's literary history is often ignored in the canon. Examines the concepts of feminism through a Mexican framework, starting from the point of view of Mexican women theorizing about their own. This is not a history of feminism, but it does aim to highlight certain fundamental texts and key concepts of Mexico's history from the position of women writers, including feminism's critique of social structures beyond the bounds of gender relations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 350 | The Construction of a Nation: Chile in the 20th/21st Century | Examines Chilean history, politics and cultural production through its historical development and explores a multiplicity of cultural issues. Develops knowledge and appreciation of cultural and visual production of Chile and Latin America as well as acquired skills for critically analyzing texts in their applicability to modern-day society. Considers the variety of cultural and artistic productions (novel, poetry, short story, film, music, pop culture, presidential speeches) as sources of social commentary in which observations of national identities are constructed. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; Credit is allowed for only LAS 350, ENG 494 (Construction/Nation:Chile in the 20th/21st Cen) or SPA 494 (Construction/Nation:Chile in the 20th/21st Cen) |
| LAS | 351 | Cityscapes: Urban Mexican Literature and Culture | Examines major developments in contemporary Mexican literature. Begins at mid-20th century as the novel turns away from the rural novel of the Revolution, toward a more urban setting. Mexico City serves as a cultural and political center, and the novels mark social and political changes across different literary currents. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 355 | Contemporary Mexican Cinema: Changing Cartographies | Examines major themes and auteurs in contemporary film as their work intersects with larger cultural phenomena, expanding students' cultural knowledge as well as critical communication skills. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 471 | Treaties and Cultural Production in Spain and the Americas | Emphasizes sociocultural values associated with national, transborder and transatlantic identities providing a panoramic view of treaties, agreements, constitutions and cultural production by Americans and Spaniards from 1812 to 2012 with particular focus on the themes of nations, borders, citizenship and identity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 480 | Current Trends in Theatre and New Media in Latin America and Spain | Overview of the transatlantic cultural interrelationships between Latin American and Spanish theatre and performance in the 20th and 21st centuries. Explores topics such as cyber-theatre, Internet theatre and multimedia theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| LAS | 481 | Dictatorships and Dirty Wars: Latin American Cinema from Resistance to Reconciliation | Examines aspects of Latin American politics and culture of and through the optic of social unrest. Examines films focusing on the period(s) of recent Latin American history in which there have been social upheavals, dictatorships and state repression, "dirty wars": understood as clandestine wars waged on the citizenry by the government, social movements from below. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s) with C or better: LAS 205, 206, 330. Credit is allowed for only LAS 481 or SPA 481 or ENG 494 (Dictatorships/Dirty Wars:Lat Am Cinema) or SPA 494 (Dictatorships/Dirty Wars:Lat Am Cinema) |

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| LAS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| LAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| LAS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| LAS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| LAT | 101 | Elementary Latin | Basic Latin grammar with an emphasis on developing reading skills. For beginning students only. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| LAT | 102 | Elementary Latin | Continuation of LAT 101. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: LAT 101 |
| LAT | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| LAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| LAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 201 | Intermediate Latin I | Final semester of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 102 |
| LAT | 202 | Intermediate Latin II | Beginning reading of Latin authors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | HU | Pre-requisites: LAT 201 |
| LAT | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| LAT | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| LAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 301 | Roman Authors | Intermediate Latin reading class that introduces Roman prose authors such as Livy, Cicero and Pliny and explores the variety of genres within Latin prose, such as historical accounts, personal letters and political oratory. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): LAT 201 with C or better; Credit is allowed for only LAT 301 or LAT 394 (Introduction to Latin Authors) |
| LAT | 322 | Medieval Latin | Surveys Late Antique and medieval Latin authors and texts, both prose and poetry. Some review of grammar. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: LAT 201 with C or better |
| LAT | 344 | Classics and Comics | Explores the connections between the classical tradition of Ancient Greek and Roman literature and the modern American superhero comic book tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GRK 344 or LAT 344 or SLC 344 or GRK/LAT/SLC 394 (Classics and Comics) or SLC 494 (Classics and Comics) |
| LAT | 360 | Greece and Rome at War | | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| LAT | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| LAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 421 | Roman Literature | Readings in the Latin masterpieces. Authors read change each year in accordance with needs of the class. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |

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| LAT | 422 | Roman Literature | See LAT 421. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: LAT 202 |
| LAT | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| LAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| LAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| LAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| LAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAT | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 105 | The Structure and Methodology of the American Legal System | What is law? What is the structure of the American legal system? What does it mean to understand law in the context of that system? How is this system effective and problematic and how does its evolution over time change our perceptions of and relationships with those who are part of it? Provides answers to these and other questions while simultaneously developing a working understanding of American law, its practicalities, and externalities. Takes the form of a comprehensive inquiry into the legal system, its origins, structures, applications, success, failure, and decision-making processes. In asking probing questions about the system and its nature, explores the values and philosophies that inform our American conception of the law and its role in society. | N | LEC | N | OPT | College of Law | College of Law Dean's Office | 3 | | |
| LAW | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1 | | Pre-requisites: Freshman standing |
| LAW | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | College of Law Dean's Office | 1-4 | | Pre-requisites: JD students may not enroll. |
| LAW | 210 | Law, Culture and Community | Considers how law constructs meaning from the world around us. Explores not only what law is, but why law is, and where law shows up in American public and private life. Examines the roles of law in facilitating cooperation and resolving conflict with an interdisciplinary lens of history, philosophy, religious studies, political and legal theory. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 210 or 294 (Law, Culture & Community) |
| LAW | 215 | Business, Law, and Society | Examines the philosophical and legal framework of business--the basic concepts of business entities, contracts, accountability, and relationships with an emphasis on the social context in which these concepts operate. Emphasizes the concepts of law and ethics throughout the course. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Undergraduate student; Credit is allowed for only LAW 215 or 294 (Business, Law, and Society) |
| LAW | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |

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| LAW | 310 | The Global Legal Community | Introduces the building blocks of the developing "global legal community," global governance institutions, both public and private, international law and transnational legal regimes. Examines how dynamic area of law is influenced by, and influences the conduct of the international and domestic relations. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 310 or 394 (The Global Legal Community) |
| LAW | 315 | Foundations in American Business Law | Explores the foundations of American business law. Topics covered include: the structure and processes of the U.S. legal system, a comparison of transactional law and business litigation concepts and processes, and the role of regulation in the free market. Students read law cases and other legal texts such as legislation, professional and academic legal writing. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): minimum 45 hours |
| LAW | 316 | Introduction to Corporate Tax Law and Policy | Hands-on introduction to the basics of U.S. Federal and Arizona state corporate tax law. Explores the economic and social policy foundations of the tax codes. Students use the tax code to address various business scenarios they may face. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Credit is allowed for only LAW 316 or 394 (Intro Corporate Tax Law&Policy) |
| LAW | 322 | Consumer Protection Law | Since the "Progressive Era" at the turn of the last Century, many new consumer protection agencies were created: The Food and Drug Administration, The Public Health Service, The Federal Trade Commission, Agencies to Control Narcotics, and fifty years later the Consumer Product Safety Commission, the Environmental Protection Agency and the Radiation Health programs, Nuclear Regulatory Commission. Focusing mostly on health products, look at these efforts and their effects on the products we use, the choices we make and the assurances we have as consumers that these products are well manufactured and deliver the goods. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only LAW 322 or 394 (Consumer Protection Law) |
| LAW | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 480 | Business, Law and Society | What would a legal system that is pro-business look like? Explores the role law plays in American business. Considers what it means to have business relations generally governed by the rule of law, and specifically in the United States legal system. Draws on legal theory, political theory, and American legal history to guide us. Examines some of the legal tools of the trade from property law and contract law that are fundamental to the conduct of American business. Discovers that the development of legal doctrines promoting free enterprise are at times tempered by social justice concerns rooted in conceptions of equality and fairness. Considers how the current legal regulatory climate promoting corporate social responsibility impacts business decisionmaking. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): LAW 210, LAW 215 or 294 [Business, Law and Society]; junior or senior standing. Credit is allowed for only LAW 480 or LAW 494 (Business, Law and Society) |
| LAW | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 515 | Contracts | Explores common law legal method and the structure of Article 2 of the U.C.C. in the context of issues of contract formation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 516 | Criminal Law | Substantive law of crimes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 517 | Torts | Legal protections of personality, property, and relational interests against physical, economic, and emotional harms. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 518 | Civil Procedure | Explores the structure of a lawsuit and techniques of alternative dispute resolution. Specific topics include commencement of suit, joinder of parties, discovery, pretrial motions, subject matter and personal jurisdiction, res judicata, collateral estoppel, and choice of law under the Erie doctrine. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-5 | | |
| LAW | 519 | Legal Method and Writing | Examines methods used to analyze legal problems. Reviews precedent statutory construction and basic res judicata problems. Use of basic legal writing formats. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 522 | Constitutional Law I | Role of courts in the federal system, distribution of powers between state and federal governments, and the role of procedure in litigation of constitutional questions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | |
| LAW | 523 | Property | Indicia of ownership, found property, estates in land, landlord tenant, nonpossessory interests in property, nuisance, land use planning, and transfers of interests in property. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 524 | Legal Advocacy | Continuation of LAW 519. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LAW | 530 | Fundamentals of Contract Law | Explores the fundamental principles of contract law under the common-law and Uniform Commercial Code statutory provisions. Focuses on issues of contract formation and interpretation, defenses to enforcement, warranties and conditions, and remedies for breach of contract. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major; Credit is allowed for only LAW 530 or LAW 598, Fundamentals of Contract Law |
| LAW | 581 | U.S. Law and Legal Analysis | Introduces non-JD students to the U.S. legal system and to the types of legal reasoning used by U.S. lawyers and judges. Provides the necessary instruction to use legal reasoning in work, including reading and understanding cases and statutes and applying existing law to the issue presented. Extensive written legal analysis exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |
| LAW | 582 | Patent Drafting | Prepares students to draft patent applications on behalf of clients. Additionally, students learn the techniques and language necessary to reply to Offices Actions issued by the United States Patent and Trademark Office (USPTO). Provides significant drafting experience, requiring three separate writing submissions and revisions based on instructor feedback throughout the course. Students create work product examples that can be shared with potential employers and/or prospective clients. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 3 | | Prerequisite(s): Master of Legal Studies major |
| LAW | 585 | Comprehensive Patent Practice | Prepares students for the patent prosecution process, as administered by the United States Patent and Trademark Office (USPTO). Uses a "cradle to grave" approach, beginning with the earliest steps taken when preparing to draft a patent application for a client and ending with post-decision options and activities available to those awarded with an issued patent or denied an issued patent. | N | LEL | N | GNA | College of Law | Sandra Day O'Connor College of Law | 5 | | Prerequisite(s): Master of Legal Studies major |
| LAW | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 596 | Professional Legal Writing | Teaches non-JD students how to organize a legal research project by analyzing the facts and identifying the issues involved, determining the research tools needed to correctly investigate the legal problem, and systematically using these tools to strengthen and support the desired legal argument. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: Laws (USLaw&Global Legal Pract) or Legal Studies students |
| LAW | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 601 | Antitrust Law | Legislation and its implementation to prevent monopoly and business practices in restraint of trade, including restrictive agreements involving price-fixing, trade association activities, and resale price maintenance. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisites: College of Law student |
| LAW | 602 | Civil Procedure II | Focuses on the Rules of Civil Procedure and how lawyers use the Rules in litigating civil cases from initiation through the pre-trial stages. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | |
| LAW | 603 | Conflict of Laws | Problems arising when the operative facts of a case are connected with more than one state or nation. Choice of law, bases of jurisdiction, effect of foreign judgments, and underlying federal and constitutional issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LAW | 604 | Criminal Procedure | Nature of the criminal procedural system with special focus on constitutional protections for the accused. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisites: College of Law student |
| LAW | 605 | Evidence | Principles and practice governing the competency of witnesses and presentation of evidence, including the rules of exclusion and roles of lawyer, judge, and jury under the adversary system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 606 | Federal Income Taxation | Federal income tax in relation to concepts of income, property arrangement, business activity, and current tax problems, with focus on the process of tax legislation and administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisites: College of Law student |
| LAW | 607 | Nanotechnology Law and Policy | Provides an overview of the legal and policy issues relating to nanotechnology, including risk management, national and international regulations, intellectual property, privacy issues, and liability issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 610 | Advanced Criminal Procedure | Topics in criminal procedure, with emphasis on legal constraints on grand jury investigations, police practices, pretrial release, preliminary hearings, prosecutorial discretion, and plea bargaining. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |

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| LAW | 611 | Estate and Gift Tax | Tax laws relating to transfer of wealth both at death and during lifetime, including federal estate tax, gift tax, and income taxation of estates and trusts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student; LAW 606 |
| LAW | 612 | Family Law | Legal and nonlegal problems that an individual may encounter because of a situation as a family member. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 613 | Federal Courts | Federal judicial system; relationship of federal and state law; jurisdiction of federal courts and their relation to state courts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 614 | International Contracts | Explores the laws applicable to international contractual relations, focusing heavily on the United Nations Convention on Contracts for the International Sale of Goods. One of several offerings in the field of International Business Transactions, touches on choice of law rules and a comparison of selected UCC with CISG provisions; a comparison of the contract law of selected foreign nations with the UCC; and the law of contracts in the United States. The casebook is heavily oriented toward a problem method of study. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 615 | Public International Law | Role of law in international disputes. Considers drafting and interpretation of treaties and multilateral conventions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 616 | Jurisprudence | Introduces legal philosophy, with readings on the nature of law and legal reasoning, the relationship between law and morality and equality and social justice. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 617 | Genetics and the Law | Provides background on genetics and recent genetic advances; addresses the legal consequences and issues associated with such advances. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): College of Law major or MS in Biomedical Diagnostics major. Credit is allowed for only BMD 617 or LAW 617 |
| LAW | 618 | Decedent's Estates | Substantive concepts involved in transmitting wealth, including interstate succession, wills and will substitutes, the modern trust as a family protective device, creation of future interests in a planned estate, social restrictions of a nontax nature, and methods of devoting property to charitable purposes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 620 | Civil Rights Legislation | Coverage of the rights and remedies provided by federal civil rights legislation, principally, the key provisions of the Reconstruction Era Civil Rights Acts, portions of the employment discrimination legislation, and voting rights legislation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 621 | Sales | Advanced issues involving the formation and interpretation of sales and lease contracts. Focuses primarily on Articles 2 and 2A of the Uniform Commercial Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 622 | Secured Transactions | Secured transactions under Article 9 of the Uniform Commercial Code and other relevant sections. Overview of the creation, perfection, and priority effects of security interests. Financing of business enterprise and consumer credit. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 624 | Community Property | Property rights of husband and wife; the Arizona community property system; homestead. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-2 | | Pre-requisite: College of Law student |
| LAW | 625 | Constitutional Law II | Fundamental protection for person, property, political, and social rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 626 | Writing for Law Practice | Helps students attain an advanced level of writing proficiency by exposing them to a broad range of legal documents. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: Juris Doctor Candidate; Credit is allowed for only LAW 626 or 665 |
| LAW | 627 | Corporate Taxation | Problems in taxability of the corporation, corporate distributions, and corporate reorganizations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 628 | Creditor-Debtor Relations | Creditors' remedies in satisfaction of claims and debtors' protection and relief under bankruptcy, other laws. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 629 | Employment Law | Employment law topics including testing, privacy, OSHA, FLSA, benefits, worker's compensation, rights to compensation, workplace emotional injuries, termination, and sexual harassment. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 630 | Employment Discrimination | Focuses primarily on Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 631 | Environmental Law | Litigation, administrative law, and legislation relating to problems of environmental quality. Topics covered may include air and water pollution, toxic substances, pesticides, and radiation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 632 | Federal Indian Law I | Inquiry into legal problems special to American Indians and tribes. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 633 | Law, Litigation, and Science | Fills a gap in the education of most lawyers, namely, how to effectively think about and use empirical evidence. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 635 | Juvenile Law | Special problems in the juvenile system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 636 | Land Use Regulation | Legal problems in the regulation and control of land development by state and local governments. Administration of zoning, subdivision, and other planning controls; issues of fairness and procedure in the utilization of such controls. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 637 | Lawyering Theory and Practice | Issues of competency and professionalism in the practice of law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 4 | | Pre-requisite: College of Law student |

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| LAW | 638 | Professional Responsibility | Emphasizes the Model Rules and Model Code that govern the professional responsibility of lawyers and their interpretation and application. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 639 | Natural Resource Law | Examines the constitutional basis for federal land management and the different kinds of public lands management schemes (e.g., parks, forests, wildlife refuges), emphasizing acquisition of right to, and regulation of, the different uses of public lands and resources (e.g., mining, grazing, timber, wildlife habitat, recreation). | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 640 | Securities Regulation | Selected problems arising under the major statutes concerned with regulating the securities market. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 642 | White Collar Crime | Examines the ways in which white collar crime is prosecuted, principally in the federal system. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 643 | Water Law | Acquisition of water rights; water use controls; interstate conflicts. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 645 | Patent Law | In-depth examination of substantive patent law as it applies to the commercialization and enforcement of patent rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 646 | Copyright Law | Legal rights in original forms of human expression. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3 | | Pre-requisite: College of Law student |
| LAW | 647 | Mass Tort Litigation | Examines unique procedural and substantive issues that arise in mass tort litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 648 | International Intellectual Property | Considers patents, copyrights, and trademarks under international law and the major international treaties. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 649 | Scientific Evidence | Examines the use of scientists and scientific tests or studies in criminal and civil litigation. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 650 | Health Law | Introduces health law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 651 | Public Health Law | Addresses the relationship between the state and the population's health. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 652 | Bioethics and the Law | Covers a range of issues relating primarily to human reproduction and life and death decisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 653 | Bankruptcy | Covers basic bankruptcy law and practices. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 654 | Business Organizations | Covers the primary forms of business organizations: partnerships, limited partnerships, limited liability companies, and corporations. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 3-4 | | Pre-requisite: College of Law student |
| LAW | 655 | Chapter 11 | Covers the law and practice of reorganizing business entities under Chapter 11 of the United States Bankruptcy Code. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisite: College of Law student |
| LAW | 656 | Valuing Real Estate and Closely-Held Businesses | Focuses on the valuation of interests in real property and closely-held businesses. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 657 | Private Property Rights | Explores the conflict between property rights and the right of the government to acquire private property for public use. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 658 | Arizona Constitutional Law | Examines the basic provisions of the Arizona Constitution and the judicial decisions interpreting those provisions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student; LAW 522; Pre/Co-requisite: LAW 625 |
| LAW | 660 | Advanced Estate Planning | Covers advanced estate planning and estate administration issues. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 661 | Constitutional Literacy | Academic complement to the Marshall-Brennan Constitutional Literacy Program where law students teach constitutional law to high school students. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 662 | Alternative Dispute Resolution and Employment Law | The use of alternative dispute resolution has been most extensive in the area of employment law. Mediation and arbitration are widely used not only in the collective bargaining setting, but also in virtually every aspect of the employment relationship. Offers a comprehensive review of the subject with special emphasis on the extensive body of law that has developed in regulating employer-imposed arbitration. Discussion of mediation includes use of simulations to enable the students to understand how mediation can effectively resolve employment disputes. Opportunities to observe real mediations of employment disputes. Experienced attorneys discuss the "real world" use of employment ADR from a plaintiff's and a defendant's perspective. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 664 | Intellectual Property | Surveys the laws conventionally grouped as intellectual property, with a focus on patents, copyrights, and trademarks. Explores the policy rationales for each body of law. Particularly relevant for two types of students: (a) those who are unsure they want to specialize in IP and want a general introduction, and (b) those who do not have room in the schedules to take all of the upper-level offerings here at ASU. Not appropriate for students who have already taken the upper-level courses in copyright, trademark, and patents; students who have taken these offerings may be withdrawn. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 665 | Fundamentals of Legal Drafting | Fundamental writing skills applicable to drafting normative legal documents. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |

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| LAW | 667 | FDA Regulation | Examines the regulation of drugs, medical devices, and biologics (e.g. vaccines) by the Food and Drug Administration. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| LAW | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 697 | Visiting Student Program | | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 0 | | |
| LAW | 701 | Arbitration | Examines the Federal Arbitration Act and the Uniform Arbitration Act as it has been adopted in Arizona. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 702 | Alternative Dispute Resolution | Broad exposure to methods of settling disputes in our society such as mediation, arbitration/conciliation, and negotiation, including examination of the current litigation model. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 703 | Law, Science, and Technology | Legal mechanisms used in dealing with various issues raised by contemporary science and technology. Explores current legal responses to science and technology. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 704 | Federal Indian Law II | Surveys the federal legal doctrines surrounding Indian ownership and exploration of resources. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 705 | Media Law | Examines First Amendment principles and statutory and regulatory requirements with respect to the conventional print and broadcast media, as well as recent technologies such as cable. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 706 | Immigration Law | Explores political, economic, social, and legal issues concerning immigration. Specific topics covered include citizenship and naturalization, denaturalization, deportation, and refugee rights and asylum. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 707 | Elder Law | Looks at legal and policy questions related to aging individuals and an older society. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 709 | International Human Rights | International rules and procedures governing the protection of human rights. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 710 | Real Estate Tax Planning | Discusses topics, including but not limited to real estate investments as tax shelters, alternative acquisition finance devices, refinancing techniques, and nontaxable exchanges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 712 | Religion and the Constitution | In-depth study of the establishment and free exercise clauses of the First Amendment to the U.S. Constitution. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 713 | Tribal Law and Government | Analyzes particular problems in tribal law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 715 | Sports Law | Unique legal problems relating to professional sports, including their relationship to antitrust laws, the nature of player contracts, and associated tax problems. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 718 | Economic Development in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: Law major; Credit is allowed for only LAW 718 or PUP 718 |
| LAW | 719 | International Indigenous Rights | Examines the developments in recognizing indigenous rights in people's systems of international law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 720 | Indian Gaming Law | Surveys the law surrounding the Indian gaming industry. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 721 | Education and the Law | Current legal problems affecting institutions of higher education, faculty, students, and governing boards. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 723 | Cultural Resources Law | Focuses on the protection of Native American cultural resources and religions. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 724 | Privacy | Traces the development of privacy law with special attention to contemporary challenges. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 725 | Critical Race Theory | Focuses on the idea of "race" as a social/political construct and examines the impact of American law on the construction of race. Provide historical and legal background necessary to understand the significance of race within American law and policy. Evaluate a number of legal frameworks that address issues of race and ethnicity in various contexts (e.g. segregation laws, civil rights law, federal Indian law, international human rights law). Assesses various jurisprudential accounts evaluating the ethical and moral underpinnings of the law. Critical race theory is known as a jurisprudential framework that is often critical of standard liberal approaches. Evaluates the critiques of liberalism and the scholarship of both liberal and critical theorists. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 733 | Negotiation | Explores alternative models of negotiated dispute resolution, as well as the roles of lawyer and client in the negotiation process. Extensive use of simulation exercises. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 734 | Products Liability | Traces the development of products liability law; analyzes the major issues currently confronting the courts in this area. | N | SEM | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | Pre-requisite: College of Law student |
| LAW | 735 | Teaching Assistant | Legal writing teaching assistants assist a writing professor with various tasks throughout the semester. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| LAW | 736 | Advanced Legal Research Seminar | Focuses on a rigorous review of basic print and electronic resources and strategies for conducting legal research, federal/state. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LAW | 737 | Cults and Alternative Religions | Provides opportunity to study laws and policies governing cults. While the definition of a "cult" will be a topic of initial study in the seminar, it may be conceived of loosely as a group with a charismatic leader whose members are persuaded to relinquish their self-identities and material possessions in furtherance of the group's goals. In addition to analyzing the definition of a "cult," the first part of the seminar discusses the various types of cults, studying particular cults, and learning about cultic activities. The remainder covers domestic and foreign legal and policy issues generated by cults, including the legal rights of cultic organizations, anti-cult organizations, cult members, and cult members' families. Covers conventional religions that are conceptually similar to cults, to the degree that religious movements fall outside the mainstream. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | |
| LAW | 738 | Trial Advocacy | Confronts issues of trial advocacy through simulation of a variety of aspects of trial practice in a mock court setting. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 605 |
| LAW | 739 | Economics and the Law | Explores premises of the law and economics movements and their applications to property, contract, and tort law. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 745 | The Supreme Court | Intensive examination of selected current decisions of the U.S. Supreme Court. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-3 | | |
| LAW | 768 | International Business Transactions | Introduction to U.S., foreign, and international law regulating cross-border business transactions and to the structure of cross-border business deals. | N | LEC | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Pre-requisites: LAW 515 and 654 |
| LAW | 770 | Law Journal | Academic credit for successful completion of editorial work by a member of the staff of Arizona State Law Journal. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 771 | Jurimetrics Journal | Academic credit for successful completion of editorial work by a member of the staff of the Jurimetrics Journal of Law, Science, and Technology. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 772 | Defender Clinic | Placement in the Public Defender Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 773 | Civil Justice Clinic | Placement in the Civil Practice Clinic and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 774 | Criminal Practice Clinic | Placement with various prosecutor offices in the Phoenix area and related classroom component. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student; LAW 605 |
| LAW | 775 | Mediation Clinic | Study of the mediation process and experience as mediators in cases pending before the justice courts and administrative agencies. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 776 | Indian Legal Clinic | Provides law students the opportunity to participate in cases dealing with native peoples and Indian issues. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | |
| LAW | 777 | Innovation Advancement Legal Clinic | Allows students to gain real-world experience in legal areas such as patentability of inventions, patent drafting, and technology valuation. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 778 | Immigration Law and Policy Clinic | Live-client clinic where students represent Latinos, particularly children, in immigration proceedings and the immigration courts. | N | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-6 | | Pre-requisite: College of Law student |
| LAW | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 781 | Independent Study | With the approval of a faculty member, a student may research a legal subject of special interest and prepare a paper suitable for publication. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Pre-requisite: College of Law student |
| LAW | 782 | Independent Study | See LAW 781. | N | IND | N | OP6 | College of Law | Sandra Day O'Connor College of Law | 2 | | |
| LAW | 783 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-3 | | |
| LAW | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Pre-requisite: College of Law student |
| LAW | 785 | Externship | Supervised, practical lawyering in an external placement proposed by the student or established by a sponsoring agency and approved by the Sandra Day O'Connor College of Law. In addition, an associated academic component is established by the student with a member of the faculty. | Y | PRA | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OP6 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| LAW | 795 | Cont Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | College of Law | Sandra Day O'Connor College of Law | 1 | | |
| LAW | 797 | Visiting Student Program | | N | LEC | N | Z3 | College of Law | Sandra Day O'Connor College of Law | 0 | | |

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| LDE | 261 | Landscape Architecture Design Fundamentals III | Applies design fundamentals with an emphasis on landscape architectural issues. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 4 | | Prerequisite(s): Landscape Architecture major; passed milestone; ALA 122 with C or better; Corequisite(s): ALA 235 |
| LDE | 262 | Landscape Architecture Design Fundamentals IV | Applies design fundamentals to landscape architectural design with emphasis given to human factors. | N | LEC | N | GNA | Herberger Inst Design & Arts | The Design School | 4 | | Prerequisite(s): Landscape Architecture major; LDE 261 with C or better |
| LDE | 361 | Landscape Architecture I | Site planning; analysis of natural and cultural features; site systems and implications for plan making and design. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; ALA 226 with C or better; Co-requisites: LTC 343 |
| LDE | 362 | Landscape Architecture II | Site design; site-specific design of configured space by the creative development of form. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 361 (or PLA 361) with C or better |
| LDE | 363 | Landscape Planting Design | Functional and aesthetic use of plants in arid-region landscape design. Explores design philosophies through planting design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; Co-requisites: LTC 344, LDE 461 |
| LDE | 461 | Landscape Architecture III | Landscape ecological planning: collection and application of ecological data relevant to planning and design at landscape scale. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 362 with C or better; Co-requisites: LTC 344; LDE 363 |
| LDE | 462 | Landscape Architecture IV | Advanced landscape architecture: integrative capstone studio with multifaceted design problems. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 5 | | Pre-requisites: Landscape Architecture student; LDE 461 with C or better; Co-requisite: LTC 446; LPH 411 |
| LDE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LDE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LDE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LDE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LDE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LDE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LDE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| LES | 305 | Business Law and Ethics for Managers | Legal theories, ethical issues, and regulatory climate affecting business policies and decisions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey student, or non-business student with minimum 2.5 ASU cum GPA and minimum 56 earned hours, or non-degree student with minimum 2.5 ASU cum GPA, or graduate student |
| LES | 306 | Business Law | Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letters of credit, and bank deposits and collections. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-Requisites: Student in Accountancy; Global Management student in Conditional or Professional Business status |
| LES | 380 | Consumer Perspective of Business Law | Role of law as it affects society. Uses case studies to present principles that govern business and consumers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Must have a minimum GPA of 2.00 ASU Cum GPA and a minimum total earned hours of 56, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| LES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: Minimum 2.00 GPA; Minimum 56 hours OR Non-degree seeking student |
| LES | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student. Credit is allowed for only LES or REA 411 |
| LES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LES | 581 | Essentials of Law for Managers | Studies legal components of business decisions, multiple aspects of law affecting business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 582 | Ethical Issues for Managers | Studies ethical decisions; the role of business in society. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1.5-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LES | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIA | 101 | Student Success in the College of Liberal Arts and Sciences | Introduces students to resources that help them succeed in the College of Liberal Arts and Sciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Pre-requisite: Freshman standing; Credit is allowed for only LIA 101 or 194 (Intro Liberal Arts & Sciences) |
| LIA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| LIA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | |
| LIA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | |
| LIA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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| LIA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LIA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-14 | | |
| LIA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LIA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| LIA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-3 | | |
| LIA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 501 | Approaches to Research | Theories, methods and/or methodologies as well as qualitative and/or quantitative approaches to the specific discipline. Also serves as an introduction to the profession. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ENG 501 or LIN 501 |
| LIN | 510 | Linguistics | Overview of linguistics, its subfields, and some of its applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Students who have credit for BLE 537, may not enroll in LIN 510 |
| LIN | 511 | Phonetics and Phonology | Current trends in phonological theory and its basis in acoustic and articulatory phonetics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 513 | Semantics | Current approaches to linguistic meaning with particular attention to English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 514 | Syntax | Analyzes syntactic structures using a generative theoretical model with a focus on English. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 515 | American English | Development of the English language in America, including regional and social varieties, and its relationship to other immigrant and native languages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 516 | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 516 | Pragmatics and Discourse Analysis | Studies language use in context and language structures in spoken and written texts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: Students who have credit for ENG 413, many not enroll in LIN 517 |
| LIN | 517 | History of the English Language | Surveys the development of the English language, with an emphasis on major linguistic transformations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Students who have credit for ENG 413, many not enroll in LIN 517 |
| LIN | 520 | Second-Language Acquisition Theories | Theories of second-language acquisition, including the linguistic, cognitive, and sociocultural aspects. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 521 | Methods of Teaching English as a Second Language | Methods of teaching English as a second language, language teaching trends, practical applications, and the teaching of different skills. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 522 | Grammar for TESL | Surveys major grammatical structures in English and how they can be taught to ESL speakers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 523 | Language Testing and Assessment | Introduces the theory and practice of language test construction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 524 | Curriculum Design and Materials Development | Practical guide to curriculum and materials development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 525 | Teaching Second Language Writing | Provides a critical introduction to the field of second language writing as well as issues and strategies in the teaching of second language writing in a wide variety of contexts. After exploring various instructional contexts as well as the characteristics of different types of students and their texts, considers various instructional practices and strategies, focusing on course and assignment designs, reading-writing connection, teacher and peer feedback, grammar instruction, classroom assessment, plagiarism and text borrowing strategies, and negotiating language differences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only LIN 525, 591 (Teaching 2nd Language Writing) or ENG 525 |
| LIN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-----------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------|
| LIN | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 610 | Advanced Studies in Linguistics | Different topics such as morphology, semantics, typology, history of linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 614 | Advanced Studies in Syntax | Focuses on morphosyntactic feature checking, movement, phrase structure, and their crosslinguistic differences. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 615 | Advanced Studies in Sociolinguistics | Language in its social setting, e.g., social variation among native speakers, sociolinguistics aspects of second-language acquisition, and language policy. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 616 | Advanced Studies in Discourse Analysis | Advanced analysis of spoken and written discourse emphasizing different methodological and theoretical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 617 | Advanced Studies in Historical Linguistics | Overview of theories on language change, the history of languages, and of methods in historical linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 620 | Advanced Studies in Second-Language Acquisition | Selected topics in second-language acquisition, such as phonetics and phonology, morphology, syntax, and discourse. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 625 | Advanced Studies in Second Language Writing | Provides opportunities to explore advanced research topics as well as current issues and controversies in the field of second language writing--an interdisciplinary field of inquiry simultaneously situated in applied linguistics, rhetoric and composition, and teachers of English to Speakers of Other Languages. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ENG or LIN 625 |
| LIN | 655 | Disciplinary Discourses | Investigation of professional and disciplinary issues related to linguistics and applied linguistics. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ENG 655 or LIN 655 |
| LIN | 656 | Studies in Cross-Cultural Discourse | Theoretical and methodological issues in the comparative study of discourses between cultures and communities of practice. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of English | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LIN | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of English | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIN | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of English | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LIS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| LIS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LIS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-Requisite: Must be Post Bac Undergraduate, Non Degree Graduate or Degree Graduate student |
| LNP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LNP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LNP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LNP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LNP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LNP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 310 | History of Landscape Architecture | Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU & H & G | Pre-requisites: Landscape architecture majors; ALA 100 or ALA 102; passed the degree milestone review, or non-majors with sophomore standing |
| LPH | 311 | 20th-Century Landscape Architecture | Explores concerns, projects, and movements in landscape architecture of late 20th-century understanding; social, ecological, regional, and historical influences. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | HU | Pre-requisites: Landscape architecture majors; ALA 100 or 102; passed the degree milestone review, or non-majors with junior standing |
| LPH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 411 | Landscape Architecture Theory and Criticism | Critically analyzes landscape architecture theories and projects to evaluate validity of design and contribution to society. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | L | Pre-requisites: Landscape Architecture; LDE 461 and LPH 311 with C or better; Co-requisites: LDE 462 and LTC 446 |
| LPH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| LPH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LPH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LPH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LPH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LPH | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 322 | Fundamentals of Ecology Laboratory | Investigational field course on fundamental concepts in ecology. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 320 or BIO 320 (with C or better if completed) |

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| LSC | 347 | Fundamentals of Genetics | Science of genetics, gene flow, and genetic engineering in humans and other organisms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187) and CHM 116 with C or better |
| LSC | 348 | Fundamentals of Genetics Laboratory | Investigational lab using modern molecular techniques to analyze various genetic phenomena. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; CHM 113 with C or better; CHM 116 with C or better; Pre or Co-requisites: LSC 347 (with C or better if completed) |
| LSC | 359 | Animal Physiology Laboratory | Investigative lab experience using animals (including humans) and models. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre/Co-requisites: LSC 358 or BIO 360 (with C or better if completed) |
| LSC | 362 | The Human Environment | Evolution of humans' physiological, ecological, and behavioral interaction with their environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| LSC | 363 | Genes, Race, Gender, and Society | Examines biological events and theories on race and gender and their interface with societal views. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Prerequisite(s): BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; BIO 340 or LSC 347 with C or better; BIO 353 (or LSC 353) with C or better; CHM 234 with C or better |
| LSC | 365 | The Human Organism | Analyzes human anatomy, physiology, and behavior in an ecological and evolutionary context with the methods of comparative biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SG | |
| LSC | 375 | Analytical Chemistry for Life Sciences | Presents an analysis of chemicals, including the theoretical and practical considerations regarding the separation, detection and quantitative determination of chemicals. Illustrates the application of different analytical procedures using some of the common chemicals of concern in the forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Credit is allowed for only FOR or LSC 375 |
| LSC | 376 | Analytical Chemistry for Life Sciences Lab | Provides hands-on experience with sample extraction, sample clean-up, and instrumental analysis of common chemicals. Largely focuses on the application of analytical chemistry methods to the fields of forensics and the life sciences. Mainly uses the solvent and solid-phase analyte extraction methods; gas chromatography-mass spectrometry, FTIR and NMR, generally determines analyte identification. | N | LAB | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: CHM 234 and 238 with C or better; Co-requisites: FOR 375 or LSC 375; Credit is allowed for only FOR or LSC 376 |
| LSC | 388 | Research Fundamentals for the Natural Sciences | Teaches research skills in the natural sciences. Topics covered include the basic research techniques of the study organism and system, experimental design, literature searches, statistical analysis and preparation of scientific papers and posters. | N | LEL | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 2 | | Prerequisite(s): BIO 181; BIO 182; Credit is allowed for only LSC 388 or LSC 498 (Research Fundamentals for the Natural Sciences) |
| LSC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| LSC | 430 | Environmental and Human Toxicology | Lecture/fieldwork course investigating toxic substances in the environment and their effect on the health of organisms, including humans. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188), BIO 182 (or BIO 187), and CHM 116/115 with C or better |
| LSC | 432 | Fundamentals of Pharmacology | Aspects of pharmacology using an integrated approach to familiarize students with natural and synthetic therapeutic agents used in medicine. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): BCH 361 or 371 or 461; BIO 340 or LSC 347; BIO 353; CHM 231 or 234 |
| LSC | 434 | Marine Ecology | Examines ecological processes in oceans, seas, and estuaries that emphasizes species- and community-level phenomena. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187) with C or better; LSC 320 or BIO 320 with C or better |
| LSC | 447 | Molecular Genetics Laboratory | Investigative lab involving DNA isolation, PCR, gel electrophoresis, enzyme digestion and ligation, transformation, and hybridization analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only FOR 447 or LSC 447 |
| LSC | 475 | Principles of Toxicology | Presents the fundamental principles of toxicology and its application to both human and environmental situations. Starts with the means of defining and quantifying toxic effects through dose response curves (e.g. LD50, EC50, LOEL, NOEL). Then focuses on absorption pathways for toxicants as well as the degradation metabolism pathways for toxicants. Finally focuses on the mechanism of toxic action for common poisons and environmental pollutants. Emphasizes toxicants that students are likely to encounter in forensics and environmental fields. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: BCH 361 (or BCH 371 or LSC 394; Modern Concepts in Biochemistry) and BIO 353. Credit is allowed for only FOR or LSC 475 |
| LSC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| LSC | 486 | Peer Mentoring in the Life Sciences | Advanced students learn and apply mentoring skills in teaching labs. | N | SEM | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Prerequisite(s): minimum 45 hours |
| LSC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| LSC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| LSC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |

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| LSC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | IND | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| LSC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| LSC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LAB | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LAB | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 540 | Theoretical Views of Learning in the Learning Sciences | Theoretical perspectives that inform learning scientists. Examines affordances and limitations of theories for designing productive learning environments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only EDP 540 or LSE 540 |
| LSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| LSE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 683 | Fieldwork | | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LSE | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| LSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| LSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 343 | Landscape Construction I | Landscape constructions focusing on landform transformations. Topics include landform analysis, grading, and earthwork. | N | STO | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Co-requisites: LDE 361 |
| LTC | 344 | Landscape Construction II | Characteristics of materials and methods used in landscape architectural construction. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 344 with a C or better; Co-requisites: LDE 363 and 461 |
| LTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 446 | Landscape Construction III | Landscape construction focusing on low-technology, biotechnical, regional, and experimental techniques or systems. | N | LEC | N | OPT | Herberger Inst Design & Arts | The Design School | 3 | | Pre-requisites: Landscape Architecture student; LTC 344 with a C or better; Co-requisites: LDE 462 and LPH 411 |
| LTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| LTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| LTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| LTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Pre-requisites: MAE Freshman student |
| MAE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 212 | Engineering Mechanics | Force systems, resultants, moments and equilibrium. Kinematics and kinetics of particles, systems of particles and rigid bodies. Energy and momentum principles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical or Aerospace Engineering student; PHY 121 C or better; Pre- or Corequisite(s): MAT 274 or 275 (with C or better if completed) or Non-Mech/Aero student; PHY 121; Pre- or Corequisite(s): : MAT 274 or 275 |
| MAE | 213 | Solid Mechanics | Equilibrium, strain-displacement relations, and stress-strain-temperature relations. Applications to force transmission and deformations in axial, torsional, and bending of bars. Combined loadings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): CEE 210 (or CEE 211) or MAE 212 with C or better; MAT 274 or 275 with C or better; PHY 122 with C or better |
| MAE | 214 | Computer-Aided Engineering I | Introduces geometry and construction techniques in CAD, technical drawing conventions, generating drawings from CAD models. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Pre-requisites: Mechanical & Aerospace Engineering student; MAE 212 (or ECE 212 or ECE 214) with C or better or Co-requisite: MAE 212 |

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| MAE | 215 | Introduction to Programming in MATLAB | Introduces basic topics and concepts of computer programming in MATLAB. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Mechanical and Aerospace engineering BSE student; MAT 265 (or 270); Credit is allowed for only MAE 215 or 294 (Introduction to Programming) |
| MAE | 240 | Thermofluids I | Introductory concepts in thermodynamics and fluid mechanics. Conservation of mass, momentum and energy. First and second laws of thermodynamics; application to nozzles, turbines, compressors, heat exchangers. Introduction to thermodynamic cycles. Bernoulli equation. Fluid statics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical and Aerospace Engineering majors: CHM 114 or CHM 116 with C or better; MAE 212 with C or better; MAT 274 or MAT 275 with C or better OR all other students: CEE 212 or CNE 212 or MAE 212 with C or better |
| MAE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MAE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 301 | Applied Experimental Statistics | Introduces key concepts in probability and statistics with engineering applications. Emphasizes modeling variation in observations, characterizing its distribution, and making inferences with regard to quality assurance and control. Develops critical skills such as fitting multivariate models, experimental design, and hypothesis testing, utilizing data from engineering projects, simulations, and laboratory experiences. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Aerospace or Mechanical Engineering BSE major; With C or better: CSE 100, CSE 110, or MAE 215; MAE 384; MAT 242, 342, or 343; MAT 274 or 275; MAT 267 or 272; Credit is allowed for only MAE 301 or MAE 394 (Applied Experimental Statistics) |
| MAE | 318 | System Dynamics and Control | Dynamics of physical systems, system modelling, feedback control, computer simulations and real-time experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 5 | | Prerequisite(s): Aerospace or Mechanical Engr BSE major; EEE 202 with C or better; MAE 212 & 384 with C or better; MAT 267 or 272 with C or better; PHY 131 & 132 with C or better; Pre- or corequisite(s): MAE 301 or 394 (Applied Experimental Statistics) |
| MAE | 341 | Mechanism Analysis and Design | Positions, velocities, and accelerations of machine parts; cams, gears, flexible connectors, and rolling contact; introduces synthesis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 212 with a C or better |
| MAE | 345 | Structures in a Space Environment | Space mission environment; mechanical behavior of materials and structures for space; analysis and design of space structures; finite element procedures. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 and 214 and 384 with C or better; Pre- or corequisite(s): MAE 318 and 384 with C or better if completed |
| MAE | 351 | Manufacturing Processes | Production technique and equipment. Casting and molding, forming, machining, joining and assembly, computer-integrated manufacturing, rapid prototyping, and electronics manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MSE 250 with C or better; Credit is allowed for only IEE 360 or MAE 351 |
| MAE | 372 | Fluid Mechanics | Applies basic principles of fluid mechanics to problems in viscous and compressible flow. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; AEE 360 (or MAE 360) or MEE 340 (or MAE 340) with C or better; MAE 384 with C or better |
| MAE | 384 | Advanced Mathematical Methods for Engineers | Methods for numerical solutions to engineering problems. Nonlinear equations, quadrature, ordinary differential equations. Analytical and numerical solutions to partial differential equations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | CS | Prerequisite(s): FSE undergraduate; With C or better: MAT 274 or 275; MAT 242 or 343 (or 342 if not MAE); MAE 215 (or MAE 294 Intro to Programming, CSE 100, or 110); Pre- or corequisite(s): MAT 267 or 272 with C or better; Credit for only CEE or MAE 384 |
| MAE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 400 | Engineering Profession | Impact of mechanical and aerospace engineering in a global and societal context; effects of and on globalization, environment, sustainability, economy, politics; engineering ethics and business practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Pre-requisites: Aerospace Engineering or Mechanical Engineering BSE majors; MAE 322 (or MAE 325 or MAE 394 Aerospace Structures and Materials) with C or better |
| MAE | 404 | Finite Elements in Engineering | Introduces ideas and methodology of finite element analysis. Applications to solid mechanics, heat transfer, fluid mechanics, and vibrations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 213 or ECE 313 with C or better; CEE 384 or MAE 384 or ECE 384 with C or better |
| MAE | 406 | Advanced CAE Simulation | Solution of advanced engineering problems with engineering software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: MAE 323; MAE 342 with C or better. Credit is allowed for only MAE 406 or MAE 546 |
| MAE | 417 | Control System Design | Tools and methods of control system design and compensation, including simulation, response optimization, frequency domain techniques, state variable feedback, and sensitivity analysis. Introduces nonlinear and discrete time systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 318 with C or better |
| MAE | 436 | Combustion | Thermochemical and reaction rate processes; combustion of gaseous and condensed-phase fuels. Applications to propulsion and heating systems. Pollutant formation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 340 with C or better; Credit is allowed for only MAE 436 or MAE 536 |

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| MAE | 455 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 250 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |
| MAE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |
| MAE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate student |
| MAE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MAE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite: graduate Engineering major except MS Electrical Engineering, MS Electrical Engineering (AME), MSE Electrical Engineering, PhD Electrical Engineering, or PhD Electrical Engineering (AME). Credit is allowed for only MAE 501 or MSE 501 |
| MAE | 502 | Partial Differential Equations in Engineering | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; credit is allowed for only MSE 502 or MAE 502 |
| MAE | 504 | Experimental Methods for Thermal and Fluid Processes | Theory of analog and digital signal analysis as applied to fluid and thermal measurements; optical diagnostics and micro sensors for measuring fluid velocity, pressure and temperature in unsteady flows; particle image velocimetry and thermal anemometry. Experimental methods are applied in a weekly laboratory. Students should have familiarity with Matlab or some programming language and have completed an intermediate level course in fluid dynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Graduate Engineering major |
| MAE | 505 | Perturbation Methods | Nonlinear oscillations, strained coordinates, renormalization, multiple scales, boundary layers, matched asymptotic expansions, turning point problems, and WKBJ method. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students; Credit is allowed for only APM 575 or MAE 505 |
| MAE | 506 | Advanced System Modeling, Dynamics, and Control | Lumped-parameter modeling of physical systems with examples. State variable representations and dynamic response. Introduces modern control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Pre- or corequisite(s): APM 505 or MAE 501 |
| MAE | 507 | Fundamentals of Control and Optimization | Optimal control of continuous-time dynamic systems. Linear systems and signal spaces, robust and LQR optimal control, optimization methods and LMIs. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; MAE 506 with C or better |

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| MAE | 508 | Digital Control: Design and Implementation | Analysis and design of control systems in which the digital computer plays a major role. Review of continuous control and introduction to the key effects of sampling. Elements of discrete system analysis; z-transform; sampled-data systems; sampling theorem and combined discrete and continuous system and the phenomenon of aliasing. Deterministic design methods for digital control systems (root-locus, frequency response, pole placement and estimators). Multivariable, optimal control and Kalman filtering, followed by nonlinear control and system identification. Emphasizes digital control implementation topics and a case study on robot control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only MAE 508 or MAE 598 (Digital Control: Design and Implementation) |
| MAE | 510 | Dynamics and Vibrations | Lagrange's and Hamilton's equations, rigid body dynamics, gyroscopic motion, and small oscillation theory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering students |
| MAE | 512 | Random Vibrations | Reviews probability theory, random processes, stationarity, power spectrum, white noise process, random response of single and multiple DOF systems, and Markov processes simulation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2-3 | | Pre-requisite: Graduate Engineering major |
| MAE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MAE | 515 | Structural Dynamics | Free vibration and forced response of discrete and continuous systems, exact and approximate methods of solution, response spectra, computational techniques, special topics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 510 with C or better; Credit is allowed for only CEE 536, MAE 494 (Structural Dynamics) or 515 |
| MAE | 518 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Fulton Engineering Graduate students; Credit is allowed for only CHE 518, EEE 518, MSE 475, MSE 518 or MAE 518 |
| MAE | 520 | Stress Analysis | Introduces tensors: kinematics, stress analysis, and constitutive assumptions leading to elastic and plastic behavior. Strain energy and energy methods; applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 521 | Structural Optimization | Linear and nonlinear programming. Problem formulation. Design sensitivity analysis. FEM-based optimal design of structural and mechanical systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 501 with C or better; CEE 526 or MAE 527 with a C or better |
| MAE | 523 | Fracture Mechanics | Linear elastic fracture mechanics. Nonlinear problems. Fatigue fracture. Experimental methods in fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; MAE 520 or MAE 598 (Continuum Mechanics) with C or better |
| MAE | 524 | Theory of Elasticity | Elastic behavior in two and three dimensions. Airy stress functions and displacement potentials. Elements of fracture. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; MAE 520 or MAE 598 (Continuum Mechanics) |
| MAE | 525 | Mechanics of Smart Materials and Structures | Modeling and analysis of smart materials and adaptive structures. Application areas include vibration and shape control and damage detection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student; MAE 520 or MAE 598 (Continuum Mechanics) |
| MAE | 527 | Finite Elements for Engineers | Direct stiffness, method of weighted residuals, weak formulation, and variational techniques in the solution of engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student; APM 505 or MAE 501 with C or better; Credit is allowed for only CEE 526 or MAE 527 |
| MAE | 533 | Transport Processes I | Unified treatment of momentum, heat, and mass transfer from molecular theory, and continuum points of view. Continuum equations of microscopic and macroscopic systems and multicomponent and multiphase systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only BME 533 or CHE 533 or MAE 533 |
| MAE | 536 | Combustion | Thermodynamics; chemical kinetics of combustion. Explosion and ignition theories. Reactive gas dynamics. Structure, propagation, and stability of flames. Experimental methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student. Credit is allowed for only MAE 436 or 536 |
| MAE | 540 | Advanced Product Design Methodology | Surveys research in engineering design process, artifact and design, knowledge, formal and informal logic, heuristic and numerical searches, theory of structure and complexity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical or Aerospace Engineering graduate student |
| MAE | 541 | CADTools for Engineers | Elements of computer techniques required to develop CAD software. Data structures, including lists, trees, and graphs. Computer graphics, including 2- and 3-D algorithms and user interface techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 542 | Design Geometry and Kinematics | Selected topics in geometry related to current potential applications in CAD/CAM, design theory, kinematics, and robotics. Euclidean isometrics, transformations; 4-D geometry; screw theory and its applications to robotics and assemblies. Differential geometry; curvature and torsional properties of curves and surfaces. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Mechanical and Aerospace Engineering graduate student; Credit is allowed for only MAE 542 or 598 (Design Geometry & Kinematics) |

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| MAE | 544 | Mechanical Design and Failure Prevention | Modes of mechanical failure; applies principles of elasticity and plasticity in multiaxial state of stress to design synthesis; failure theories; fatigue; creep; impact. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 546 | Advanced CAE Simulation | Solution of advanced engineering problems with analysis software for structural, dynamic, nonlinear, contact and kinematic problems; selection of modeling parameters; reliability tests on software. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Engineering Graduate student; Credit is allowed for only MAE 406 or 546 |
| MAE | 547 | Modeling and Control of Robots | Homogeneous transformations, workspace, forward and inverse kinematics, differential kinematics, statics and dynamics, motion planning, motion and force control. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Pre- or corequisite(s): APM 505 or MAE 501 |
| MAE | 557 | Mechanics of Composite Materials | Analysis, design, and applications of laminated and chopped fiber reinforced composites. Micro- and macromechanical analysis of elastic constants, failure, and environmental degradation. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering major; MAE 520 or MAE 598 (Continuum Mechanics) |
| MAE | 561 | Computational Fluid Dynamics | Finite-difference and finite-volume techniques for solving the subsonic, transonic, and supersonic flow equations. Method of characteristics. Numerical grid-generation techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering students; Credit is allowed for only AEE 471 or MAE 471, 561 |
| MAE | 564 | Advanced Aerodynamics | Perturbation method. Linearized subsonic and supersonic flows. Thin wing/slender body theories. Lifting surface theory. Panel method computation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 566 | Rotary-Wing Aerodynamics | Introduces helicopter and propeller analysis techniques. Momentum and blade-element, helicopter trim. Hover and forward flight. Ground effect, autorotation and compressibility effects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE 466 or 566 |
| MAE | 570 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics; property relationships, power and refrigeration cycles, and reactive systems. A basic knowledge of thermodynamics is required to be successful in this course. | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisite: Engineering Graduate student; Credit is allowed for only MAE 482, 570 or 598 (Thermodynamics), or MEE 482 |
| MAE | 571 | Fluid Mechanics | Basic kinematic, dynamic, and thermodynamic equations of the fluid continuum and their application to basic fluid models. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 573 | Advanced Fluid Mechanics | Mechanics of fluids flows where either the effects of inertia or viscosity are significant. Exact and approximate solutions of the Navier-Stokes equations, laminar flow and flow at low and high Reynolds numbers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 575 | Turbulence | Homogeneous, isotropic, and wall turbulence. Experimental results. Introduces turbulent-flow calculations. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 577 | Advanced Turbulence | Reynolds equations and their closure. Modeling of simple and complex turbulent flows, calculations of internal and external flows, and application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; MAE 571 with C or better |
| MAE | 578 | Geophysical and Environmental Fluid Dynamics | Dynamics of large-scale flows under the influence of stratification and earth rotation. Thermally and mechanically driven flows in turbulent boundary layer. Waves and instability of geophysical flows. Global-scale circulation. Applications to environmental prediction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 581 | Advanced Thermodynamics | Basic concepts and laws of classical equilibrium thermodynamics; applications to engineering systems; introduction and applications of statistical mechanics and kinetic theory; Boltzmann integro-differential equation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 585 | Solar Thermal Engineering | Solar energy availability, flat-plate and concentrating solar thermal collectors, solar heating and cooling, concentrating solar power (CSP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Graduate Engineering student; credit is allowed for only MAE 585 or 598 (Solar Thermal Engineering) |
| MAE | 586 | Advanced Heat Transfer | Basic concepts and governing equations. Analysis of laminar and turbulent heat transfer for internal and external flows. Natural and mixed convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 587 | Radiation Heat Transfer | Advanced concepts and solution methodologies for radiation heat transfer, including exchange of thermal radiation between surfaces, radiation in absorbing, emitting, and scattering media and radiation combined with conduction and convection. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): graduate Engineering student |
| MAE | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisites: Graduate Engineering major; Credit is allowed for only MAE 588 or SEC 588 |

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| MAE | 589 | Heat Transfer | Basic concepts; physical and mathematical models for heat and mass transfer. Applications to convective, convective, radiative, and combined mode heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MAE 494 topic (Heat and Mass Transfer) or 589 |
| MAE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): graduate MAE major |
| MAE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisite(s): Mechanical or Aerospace Engineering graduate student |
| MAE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): graduate Engineering student |
| MAE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | Prerequisite(s): graduate Engineering student |
| MAE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Pre-requisites: Mechanical or Aerospace Master's degree student |
| MAE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MAE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-15 | | Prerequisite(s): Mechanical or Aerospace Doctoral student |
| MAS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MAS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |

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| MAS | 501 | Methods for Interdisciplinary Inquiry | Critical survey of current models of inquiry, tools, processes, and methods in different fields. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 502 | Perspectives in Interdisciplinary Studies | Introduces interdisciplinarity through explorations of epistemological and rhetorical practices that bridge traditional disciplines. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 505 | Theories of Change, Culture, and Mind | Introduces graduate-level interdisciplinary study of key thinkers, movements, theories, and paradigms in 20th-century thought. | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 510 | Science and Religion: Cosmologies and Worldviews | Examines science and religion, stressing modern scientific findings and philosophical and historical debates and dialogues. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Credit is allowed for only IAS 430 or MAS 510 |
| MAS | 513 | Sociology of Everyday Life | Examines institutional ethnography, a way of exploring the particular and generalized social relations that shape people's everyday experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 514 | Continental Philosophy | Contemporary European thought emerges out of a crisis of the Enlightenment that unfolds throughout the nineteenth and twentieth centuries. Course dovetails with other fields like communication, cultural studies, law, political science, religious studies, literature and various social sciences. | N | SEM | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only MAS 514 or MAS 598 (Studies in Critical Theory) or MAS 598 (Continental Philosophy and Religion) |
| MAS | 550 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary post/secular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives | N | SEM | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-9 | | Prerequisite: Graduate (degree or nondegree) student; Credit is allowed for only MAS, PHI 550 or REL 585 |
| MAS | 573 | Art and Politics | Explores issues and relationships between the arts and politics through historical examples, significant artists and works, key thinkers, and theoretical approaches. Considers topics such as: the arts and ideology, art and the politics of representation, propaganda, censorship, state-supported art, human rights, revolution and war, cultural change, and political aesthetics. Emphasizes interdisciplinary arts and period study, including the arts and The Russian Revolution, the art in the Weimar Republic and Nazi Germany, and, generally, the arts, art and social movements (e.g., U.S. Civil Rights era, Eastern Europe's solidarity movement and Velvet Revolutions), as well as the arts and politics in selected contemporary contexts (e.g., China, the Middle East). | N | LEC | N | GNA | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAS | 585 | Capstone Course | Assists students in preparing their capstone project, which represents the culmination of their study for the MA in Interdisciplinary Studies. | N | RSC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3-4 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Pre-requisites: Interdisciplinary Studies Masters student |

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| MAS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1 | | Pre-requisites: Interdisciplinary Studies Masters student |
| MAS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): Mathematics Placement Test |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): Mathematics Placement Test |
| MAT | 106 | Intermediate Algebra | Topics from basic algebra such as linear equations, polynomials, factoring, exponents, roots, and radicals. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): Mathematics Placement Test |
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | College of Letters & Sciences | College of Letters and Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 110 | Enhanced Freshman Mathematics | Individually paced, computer-mediated course designed to prepare students for college-level mathematics. Students work on various modules in an online adaptive learning technology platform created to help students progress through the course material based on individual needs in preparation for enrollment in the next level math course required by the student's major (pre-MAT 117 "Track 1" or pre-MAT 142 "Track 2"). Upon completion of this course, students should see improvement of basic math skills, an increase in the confidence in mathematical abilities, and advancement in ability to relate math to real-life applications. Credit for this course does not count towards university graduation requirements | N | LEL | N | ELG | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-3 | | Prerequisite(s): Mathematics Placement Test below 32% for majors that require MAT 142 OR Mathematics Placement Test 32-39.9% for majors that require MAT 117 or higher (consult your major map) |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 117 | College Algebra | Linear and quadratic functions, systems of linear equations, logarithmic and exponential functions, sequences, series, and combinatorics. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or MAT 194: EFM with skills mastered for MAT 117 if completed) or Mathematics Placement Test with a score of 40% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117, 170, 210, or 270 with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117, 170, 210, or 270 with C or better or Mathematics Placement Test with a score of 50% or higher |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|-------------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 119 | Finite Mathematics | Topics from linear algebra, linear programming, combinatorics, probability, and mathematics of finance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117, 170, 210, or 270 with C or better or Mathematics Placement Test with a score of 50% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 142 | College Mathematics | Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics and finance. Appropriate for students whose major does not require MAT 117 or 170. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 110 (or 194: EFM) with skills mastered for MAT 142 if completed, MAT 117 with C or better or Mathematics Placement Test with a score of 32% or higher |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 170 | Precalculus | Intensive preparation for calculus. Topics include functions (including trigonometric), vectors and complex numbers. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or 171 |
| MAT | 171 | Precalculus: Science, Technology, Engineering and Mathematics (STEM) | Robust treatment of advanced algebraic skills and trigonometry that are vital in calculus. Algebra topics include functions, compositions, inverses, transformations, complex numbers, roots of polynomial functions, rational functions, exponential and logarithmic functions and their properties. Trigonometry is approached via the unit circle as well as the right triangle. Topics include the trigonometric functions, their graphs and identities, inverse trigonometry, the laws of sine and cosine, vectors and the dot product with an application toward work, and polar coordinates and roots of complex numbers (deMoivre's theorem). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 117 with C or better or completed the Mathematics Placement Test with a score of 50% or higher; Credit is allowed for only MAT 170 or MAT 171 |
| MAT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 0-5 | | |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 0-5 | | |
| MAT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 0-5 | | |
| MAT | 207 | Algebra and Geometry in the High School | Provides a conceptually rigorous treatment of the central ideas of algebra and geometry in high school. Explores and develops familiar mathematical content from a very different perspective. Focuses squarely on creating meaning for concepts and on building coherence of meaning across concepts and various representations of them. As such, course activities and assessments (class/lab activities, homework assignments, and exams) reflect these expectations, focusing on both doing high school mathematics with meaning and on expressing and communicating that meaning accurately and coherently in verbal and written form. Prior to enrolling in this course, students should have experience with algebra/geometry to at least the high school level. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Co-requisite: MTE 210 |
| MAT | 208 | Discrete Mathematics for Secondary Teachers | Potential secondary teachers of mathematics should master the Math Standards proposed by the National Council of Teachers of Mathematics for college-intending students. Focuses on those aspects of these standards that apply to discrete mathematics with particular emphasis on: mathematical problem solving, mathematics as communication, mathematical reasoning, and discrete mathematics. Taking a broader view, introduces mathematics as a discipline that uses known methods to discover and verify new conclusions through the study of discrete mathematics. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|-------------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 210 | Brief Calculus | Differential and integral calculus of elementary functions with applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Prerequisite(s): MAT 117, 119, 170, or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 211 | Mathematics for Business Analysis | Topics in business analysis, including: Lagrange multipliers, linear programming, linear algebra, intermediate probability, random variables, discrete distributions, and continuous distributions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 242 | Elementary Linear Algebra | Introduces matrices, systems of linear equations, determinants, vector spaces, linear transformations, and eigenvalues. Emphasizes development of computational skills. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 2 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 243 | Discrete Mathematical Structures | Logic, sets, functions, elementary number theory and combinatorics, recursive algorithms, and mathematical reasoning, including induction. Emphasizes connections to computer science. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: Minimum Sophomore standing; MAT 210, MAT 251, MAT 265, or MAT 270 with C or better |
| MAT | 251 | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 251 | Calculus for Life Sciences | Differential and integral calculus of elementary functions. Introduces differential and difference equations. Emphasizes applications to the life sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 56% or higher; Credit is allowed for only MAT 210 or MAT 251 |
| MAT | 265 | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or MAT 270 |
| MAT | 265 | Calculus for Engineers I | Limits and continuity, differential calculus of functions of one variable, introduction to integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 170 or 171 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or MAT 270 |
| MAT | 266 | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 266 | Calculus for Engineers II | Methods of integration, applications of calculus, elements of analytic geometry, improper integrals, Taylor series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Prerequisite(s): MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 267 | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | 267 | Calculus for Engineers III | Vector-valued functions of several variables, partial derivatives, multiple integration. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272 |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|-------------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 270 | Calculus with Analytic Geometry I | Real numbers, limits and continuity, and differential and integral calculus of functions of 1 variable. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 170 or 171 with C or better or Mathematics Placement Test with a score of 60% or higher and Advanced Mathematics Placement test with a score of 38 or higher; Credit is allowed for only MAT 265 or 270 |
| MAT | 271 | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 271 | Calculus with Analytic Geometry II | Methods of integration; applies calculus, elements of analytic geometry, improper integrals, sequences and series. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Pre-requisites: MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or MAT 271 |
| MAT | 272 | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | 272 | Calculus with Analytic Geometry III | Vector-valued functions of several variables, multiple integration, and introduction to vector analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | MA | Prerequisite(s): MAT 266 or MAT 271 with C or better. Credit is allowed for only MAT 267 or MAT 272 |
| MAT | 274 | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 274 | Elementary Differential Equations | Introduces ordinary differential equations, adapted to the needs of students in engineering and the sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 275 | Modern Differential Equations | Introduces differential equations, theoretical and practical solution techniques. Applications. Problem solving using MATLAB. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | MA | Pre-requisites: MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275 |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 300 | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | 300 | Mathematical Structures | Logic and set theory, induction, functions, order and equivalence relations, cardinality. Emphasizes writing proofs. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | L | Pre-requisites: MAT 210, 251, 265 or 270 with C or better |
| MAT | 310 | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | 310 | Introduction to Geometry | Congruence, area, parallelism, similarity and volume, and Euclidean and non-Euclidean geometry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 or 267 with C or better |
| MAT | 340 | Theory of Interest | Compound interest, discount rates, annuities, present values, depreciation, and bond valuations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 210, 251, 265 or 270 with C or better; Credit is allowed for only ACT 310 or MAT 340 |
| MAT | 342 | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 342 | Linear Algebra | Linear equations, matrices, determinants, vector spaces, bases, linear transformations and similarity, inner product spaces, eigenvectors, orthonormal bases, diagonalization, and principal axes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |
| MAT | 343 | Applied Linear Algebra | Solving linear systems, matrices, determinants, vector spaces, bases, linear transformations, eigenvectors, norms, inner products, decompositions, applications. Problem solving using MATLAB.4 | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 or 271 with C or better; Credit is allowed for only MAT 342 or 343 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|-------------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAT | 350 | Techniques and Applications of Applied Mathematics | Mathematical techniques and applications representative of the range of applied mathematics used in operations research, biology, economics, finance, and sociology. In depth exploration of these techniques in detail by focusing on selected applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or MAT 275; MAT 342 or MAT 343; Co-requisite: STP 420 |
| MAT | 351 | Mathematical Methods for Genetic Analysis | Discrete mathematics, probability, statistics, and associated computer packages. Applications to genomics, bioinformatics, forensics, and DNA/protein sequence patterns. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 270 (or MAT 251 or 265) with C or better |
| MAT | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 119, 210, 243, 251, 265, 270 or STP 220, 231 or 226 with C or better; Credit is allowed for only BIO 355, CPI 480, MAT 355 or MBB 355 |
| MAT | 362 | Advanced Mathematics for Engineers and Scientists | Vector analysis, Fourier analysis, and partial differential equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 274 (or 275) with C or better |
| MAT | 370 | Intermediate Calculus | Theory behind basic 1-variable calculus: continuity, derivative, Riemann integral, sequences, and series. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or 267) with C or better; MAT 300 (or 243) with C or better; Credit is allowed for only MAT 371 (with C or better) or MAT 370 |
| MAT | 371 | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | 371 | Advanced Calculus I | Real numbers, completeness, sequences/series, continuity, uniform theorems, derivative, Riemann integral, pointwise/uniform convergence, Taylor's theorem. Credit is allowed for only MAT 371 or 370 toward a mathematics degree. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 272 (or MAT 267) and MAT 300 (or 243) with C or better |
| MAT | 372 | Advanced Calculus II | Open, closed, compact sets in R^n continuity, differentiation, partial differentiation, integration in R^n Inverse/implicit function theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 371 with C or better; Pre/Co-requisite: MAT 342 or 343 (with C or better if completed); Credit is allowed for only MAT 372 or MAT 460 |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 410 | Introduction to General Topology | Topological spaces, metric spaces, compactness, connectedness, and product spaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300 with C or better |
| MAT | 411 | History and Philosophy of Mathematics | Examines nature of mathematics from origins to present, revealed by its history and philosophy. Strong background in mathematics not required. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | HU & H | Credit is allowed for only IAS 411 or MAT 411 |
| MAT | 415 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Pólya theory and combinatorial structures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 415 or 512 |
| MAT | 416 | Introduction to Graph Theory | Trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 300 (or 243) with C or better; MAT 342 (or 242 or 343) with C or better; Credit is allowed for only MAT 416 or 513 |
| MAT | 419 | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 419 | Introduction to Linear Optimization | Simplex method, duality, and network flows. Applications to game theory, geometry, combinatorics, graph theory, and posets. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s) with C or better: ACO 101 (or ACO 102 or CSE 100 or 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 420 | Scientific Computing | Surveys and applies programming languages, libraries, and scientific visualization tools. Programming assignments emphasize software development skills. Completion of advanced calculus recommended prior to this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 205; MAT 274 (or MAT 275), 342 (or MAT 343) |
| MAT | 421 | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |
| MAT | 421 | Applied Computational Methods | Numerical methods for quadrature, differential equations, roots of nonlinear equations, interpolation, approximation, linear equations, floating-point arithmetic, and roundoff error. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 272 (or 267) with C or better |
| MAT | 423 | Numerical Analysis I | Solution of systems of linear and nonlinear equations, optimization, eigenvalues, round-off error, and floating point arithmetic. Fluency in computer programming is required for enrollment in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 342 (or 343) with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MAT | 425 | Numerical Analysis II | Analysis of and algorithms for numerical interpolation, integration, and differentiation. Numerical solution of ordinary and partial differential equations, introductory level. Applications. Fluency in computer programming is required for success in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 (or 275) with C or better; MAT 371 recommended |
| MAT | 429 | Optimization | A variety of optimization models and their applications to management, economics, engineering, and science. Topics include linear programming, integer programming, nonlinear programming, and stochastic programming. Stresses formulation and modeling as well as numerous applications and solving algorithms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 with C or better; MAT 350 or 419 with C or better |
| MAT | 440 | Group Theory | Covers basic group theory. Students learn about the concept of a "group," related structures, their underlying theory, and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 441 | Ring Theory | Covers basic ring theory. Students learn about the concept of a "ring," related structures, their underlying theory, and examples of how they arise in mathematics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 300; MAT 342 or 343 |
| MAT | 442 | Advanced Linear Algebra | Fundamentals of linear algebra, dual spaces, invariant subspaces, canonical forms, bilinear and quadratic forms, and multilinear algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343 |
| MAT | 443 | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | 443 | Introduction to Abstract Algebra | Introduces concepts of abstract algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300; MAT 342 or 343. Students may not enroll in MAT 443 if credit earned in MAT 444. |
| MAT | 444 | Intermediate Abstract Algebra | Basic theory of groups, rings, and fields, including an introduction to Galois theory. Appropriate as preparation for MAT 543. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 442 or 443 with C or better |
| MAT | 445 | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | 445 | Theory of Numbers | Prime numbers, unique factorization theorem, congruences, Diophantine equations, primitive roots, and quadratic reciprocity theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: MAT 300, 342 (or MAT 343) |
| MAT | 447 | Cryptography I | Block ciphers, stream ciphers, congruence arithmetic, information theory, public key cryptosystems, key exchange, electronic signatures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: CSE 100 (or CSE 110 or 205); MAT 242 (or MAT 342 or 343), 300 |
| MAT | 448 | Cryptography II | Mathematical underpinnings of contemporary cryptosystems, electronic signatures, key exchange, primality testing and factorization algorithms. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 447. Credit is allowed for only MAT 448 or MAT 494. Cryptography II |
| MAT | 450 | Mathematical Models in Biology | Introduces mathematical models in biological systems. Applications range from the cellular level to systems level and may include applications from areas such as physiology, ecology, epidemiology, population biology, computational and systems biology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 343 (or 342) with C or better; MAT 275 (or 274) with C or better |
| MAT | 451 | Mathematical Modeling | Detailed study of 1 or more mathematical models that occur in the physical or biological sciences. May be repeated for credit with instructor approval. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 452 | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions; strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |
| MAT | 452 | Introduction to Chaos and Nonlinear Dynamics | Properties of nonlinear dynamical systems; dependence on initial conditions; strange attractors; period doubling; bifurcations; symbolic dynamics; Smale-Birkhoff theorem; and applications. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended |
| MAT | 460 | Vector Calculus | Vectors, curvilinear coordinates, Jacobians, implicit function theorem, line and surface integrals, Green's, Stokes', and divergence theorems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better; MAT 371 is recommended; Credit is allowed for only MAT 372 or 460 |
| MAT | 461 | Applied Complex Analysis | Analytic functions, complex integration, Taylor and Laurent series, residue theorem, conformal mapping, and harmonic functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 462 | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 462 | Applied Partial Differential Equations | Second-order partial differential equations, emphasizing Laplace, wave, and diffusion equations. Solutions by the methods of characteristics, separation of variables, and integral transforms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 274 or 275 with C or better; MAT 242, 342 or 343 with C or better |
| MAT | 472 | Intermediate Real Analysis I | Introduces analysis in metric spaces with emphasis on the real line. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 371 with C or better |
| MAT | 473 | Intermediate Real Analysis II | Analysis in R^n : implicit function theorem, introduction to manifolds, Lebesgue integration, change of variables formula, convergence theorems for integrals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 472 with C or better |
| MAT | 475 | Differential Equations | Linear and nonlinear ordinary differential equations, asymptotic behavior of solutions, stability, existence and uniqueness, limit sets, Poincaré-Bendixson theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274 or 275 with C or better; MAT 370 or 371 with C or better |

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| MAT | 476 | Partial Differential Equations | First-order quasilinear, second-order linear (wave, Laplace, heat). Characteristics, harmonic functions, maximum principles, Fourier series, separation of variables. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 242, 342 or 343 with C or better; MAT 274, 275 or 475 with C or better; MAT 370 or 371 with C or better |
| MAT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): Minimum 45 hours |
| MAT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | Prerequisite(s): Minimum 45 hours |
| MAT | 485 | History of Mathematics | Topics from the history of the origin and development of mathematical ideas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 267 or 272 with C or better |
| MAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MAT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| MAT | 495 | Supervised research in mathematical sciences | Supervised research in mathematical sciences. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or MAT 495 |
| MAT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| MAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MAT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| MAT | 512 | Introduction to Combinatorics | Enumerating permutations and combinations of sets and multisets, inclusion-exclusion, recurrence relations, generating functions, Polya theory and combinatorial structures. Same topics as MAT 415; mastery at much higher level required. Students with MAT 415 (even as undergraduates) may not enroll. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only MAT 415 or 512 |
| MAT | 513 | Introduction to Graph Theory | Rigorous introduction to graph theory. High-level mastery in topics such as trees, cycles, matchings, planarity, connectivity, hamiltonicity, chromatic number, Ramsey theory with emphasis on proof techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MAT 416 or 513 |
| MAT | 514 | Enumerative Combinatorics I | First semester of a systematic development of enumerative combinatorics, including elementary counting techniques, sieve methods, and partially ordered sets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 515 | Enumerative Combinatorics II | Second semester of a systematic development of enumerative combinatorics, including lattices, exponential structures, symmetric functions, and selected special topics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 516 | Graph Theory I | First semester of a systematic development of graph theory, including matchings, connectivity, arboricity, planarity, coloring, network flows. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MAT | 517 | Graph Theory II | Second semester of a systematic development of graph theory, including dense and sparse graphs, Ramsey theory, hamiltonicity, random graphs, minors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 541 | "p"-Adic Numbers | Introduces "p"-Adic numbers and analysis. Topics include valuations, completions of number fields, extensions of the field of "p"-adic numbers and "p"-adic analysis. Students should have previously taken courses in analysis and algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 542 | Elliptic Curves | Geometry and arithmetic of elliptic curves, points of finite order, the group of rational points, curves over finite fields, complex multiplication. Students should have previously taken a senior-level course in abstract algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 543 | Abstract Algebra I | Groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 544 | Abstract Algebra II | Continuation of groups, modules, rings and fields, Galois theory, homological algebra, and the representation theory | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 543 |
| MAT | 545 | Abstract Algebra III | Covers modules, Galois theory, and preparation for advanced study in algebraic parts of mathematics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 547 | Algebraic Number Theory | Algebraic properties of number fields and their completions. Topics include rings of integers, ramification, finiteness of the class group, and Dirichlet's unit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 544 |
| MAT | 561 | Ecological Modeling | Mathematical modeling of animal populations, food-web structural and ecological processes in space and time. May use modeling tools on computer clusters. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only ABS, BIO 560 or MAT 561 |
| MAT | 570 | Real Analysis I | Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 571 | Real Analysis II | Continuation of Lebesgue integration, selected function spaces, differentiation, abstract measure theory, and elements of functional analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 570 |
| MAT | 572 | Complex Analysis I | Analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 573 | Complex Analysis II | Continuation of analytic functions, series and product representations, entire and meromorphic functions, normal families, Riemann mapping theorem, harmonic functions, and Riemann surfaces. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 572 |
| MAT | 578 | Functional Analysis I | Locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 579 | Functional Analysis II | Continuation of locally convex, normed, and Hilbert spaces. Linear operators, spectral theory, and application to classical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 578 |
| MAT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MAT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MAT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MBB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 343 | Genetic Engineering and Society | Introduces genetic engineering, with emphasis on applications (transgenic plants and animals, cloning, vaccines, therapeutics, and diagnostics). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L | Pre-requisites: MBB 347 or BIO 340 with a C or better; Credit is allowed for only BIO 343 or MBB 343 |
| MBB | 347 | Molecular Genetics: From Genes to Proteins | Emphasizes molecular and cell biology and gene technology, both at the basic and applied research levels, in the growing areas of biotechnology and the molecular biosciences; focuses on molecular processes that allow genetic information to be expressed and regulated and by introducing applications to real-world situations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 282 (or BIO 181 and 182); CHM 116. Credit is allowed for only BIO 340 or BIO 349 or MBB 347 |
| MBB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 340 or MBB 247 or MBB 347 with C or better; Credit is allowed for only MBB 350 or PLB 350 |
| MBB | 355 | Introduction to Computational Molecular Biology | Introduces the mathematical skills used in molecular biology, genomics, and bioinformatics. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: MAT 119 or MAT 210 or MAT 243 or MAT 251 or MAT 265 or MAT 270 or STP 220 or STP 231 or STP 226 with C or better. Credit is allowed for only MAT 355 or BIO 355 or CPI 480 or MBB 355. |
| MBB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 440 | Functional Genomics | Covers emerging fields of genomics and proteomics. Discusses key technologies and their applications to the study of genomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or LSC 347 or MBB 347 with C or better; Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MBB | 444 | Techniques in Functional Genomics | Practical introduction to modern functional genomics techniques, including microarray analysis and DNA sequencing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: BIO 440 or MBB 440 (with C or better if completed) |
| MBB | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation, immunologic detection, and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or MBB 347 with C or better; MBB 247 or MIC 302 with C or better; Credit is allowed for only MBB 445 or MIC 445 |
| MBB | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques; plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB or MIC 446 |
| MBB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Minimum 3.3 GPA; Molecular Biology student |
| MBB | 490 | Capstone: Issues in Biotechnology | Integrates science and biotechnology industry issues dealing with intellectual property, regulatory issues, business practices, and commercialization. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Prerequisite(s): MBB 343 with C or better |
| MBB | 491 | Capstone: Issues in Molecular Biosciences | Integrates molecular science and societal issues dealing with ethics, regulatory issues, and societal needs that pertain to molecular biosciences. Both MBB 490 and MBB 491 for L General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Prerequisite(s): BIO 340 or MBB 347 with C or better |
| MBB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MBB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MBB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MBB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| MBB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |
| MBB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Minimum 3.0 GPA; Molecular Bioscience/Biotechnology student |
| MBB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| MCB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 501 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 503 | Bioimaging Lab | Provides a fundamental understanding of light-based microscopy through the training and use of instruments contained within the SOLS Keck Bioimaging laboratory. Examines the use of bright field, contrast, epi-fluorescent, total internal reflective fluorescence (TIRF), confocal, multiphoton and atomic force microscopy and how they are applied to various research applications. Additional focus given toward image ethics, analysis, and presentation using programs such as Adobe Photoshop and ImageJ. During the second half of the semester, students propose and develop an experimental project, based on their graduate research, in which they collect data, do analysis, and prepare results for a final project presentation. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: BIO 504, MCB 504, or BIO 598 (Bioimaging Current Techniques); Credit is allowed for only BIO or MCB 503 |
| MCB | 504 | Bioimaging | Lecture survey of modern techniques for imaging tissues, cells, and macromolecules, including light microscopy (e.g. video, fluorescence, confocal, multiphoton, single molecule), electron microscopy (e.g. transmission, scanning, cryogenic, tomographic) and ancillary techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO or MCB 504 |
| MCB | 506 | Clinical Gross Anatomy | Dissection of the human body with an emphasis on the application of anatomical knowledge to clinical applications. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 6 | | Credit is allowed for only ASM, BIO or MCB 506 |
| MCB | 540 | Functional Genomics | Functional relevance of genomic sequences; DNA arrays, proteomics, analysis of genomic information for metabolic physiology of organisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only BIO 440 or CBS 540 or MBB 440 or MCB 540 |
| MCB | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MCB or NEU 555 |
| MCB | 556 | Advanced Molecular and Cellular Biology II | Continuation of MCB 555. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |

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| MCB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 701 | Seminar: Molecular and Cellular Biology Colloquium | Presentation of current research by noted researchers in the field. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| MCE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 447 | Diversity in Families and Communities in Multicultural Settings | Diversity and the changing role of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| MCE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| MCE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MCE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MCE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| MCE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |

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| MCE | 548 | Multicultural Perspectives on Teaching and Learning | Facilitates understanding of key components related to cultural diversity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Undergraduate Postbaccalaureate student |
| MCO | 120 | Media and Society | Covers the role of newspapers, magazines, radio, television and motion pictures in American society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only JMC 110 or MCO 110 or MCO 120 |
| MCO | 120 | Media and Society | Covers the role of newspapers, magazines, radio, television and motion pictures in American society. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Credit is allowed for only JMC 110 or MCO 110 or MCO 120 |
| MCO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 240 | Media Issues in American Pop Culture | Examines the production and consumption of popular culture as disseminated by the mass media with emphasis on the societal implications. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | |
| MCO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 302 | Media Research Methods | Surveys research methods used in the social sciences, with a focus on mass communication. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major with minimum cumulative 2.50 GPA OR nonmajor with minimum cumulative 2.00 GPA OR graduate Mass Communications major OR ASU Online student with minimum cumulative 2.00 GPA |
| MCO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |

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| MCO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 418 | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 418 | History of Mass Communication | American journalism from its English and colonial origins to the present day. Development and influence of newspapers, magazines, radio, television, and news gathering agencies. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB & H | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 420 | Strategic Sports Communication | Covers the wide-ranging field of strategic sports communication. Prepares students for an entry-level position in the strategic sports communication field. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication or Sports Journalism or W.P. Carey major; minimum 45 hours |
| MCO | 425 | Digital Media Literacy | Helps students begin to navigate the 21st-century media, starting by becoming active users of media, not just passive consumers. The Internet-fueled democratization of media creation has enabled anyone to be a publisher, and given audiences' almost infinite choices, with both great and questionable effects. In a world of information abundance, it can be difficult to discern fact from opinion and truth from fiction. We need to know how to wade through this barrage of information with a critical eye, to be better informed, and ultimately become creators of media ourselves. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism & Mass Communication major; minimum 2.50 GPA OR non-Journalism & Mass Communication major; min 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate MCO major. Credit for only MCO 425 or MCO 494 (Digital Media Literacy) |
| MCO | 430 | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 430 | International Mass Communication | Comparative study of communication and media systems. Information gathering and dissemination under different political and cultural systems. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | G | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR a non-Journalism & Mass Comm student with minimum 2.0 GPA OR ASU Online student with minimum 2.00 GPA OR Graduate Mass Communications student |
| MCO | 435 | Social Media | Explores and critically analyzes the social, cultural, legal, ethical, economic, and technological dimensions of social media tools from Facebook to Foursquare, Twitter to Flickr and beyond. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 450 | Visual Communication | Theory and tradition of communication through the visual media with emphasis on the continuity of traditions common to modern visual media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | HU | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 455 | War and Mass Media | Provides a better understanding of the role and impact of the mass media in shaping public perceptions about one of humanity's most monumental undertakings, the act of war. Through a combination of lectures, readings, documentaries, and motion pictures, examines and critically analyzes media portrayals, real and fictional, of issues, events, and the changing dynamic among: the government, the military, and public opinion as shaped by the media. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 456 | Political Communication | Theory and research related to political campaign communication. The persuasive process of political campaigning, the role of the media, the candidate, and image creation. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 460 | Race, Gender, and Media | Readings seminar designed to give students a probing examination of the interface between AHANA Americans and the mass media in the United States. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | C | Pre-requisites: Journalism & Mass Communication student with minimum 2.5 GPA OR non-JMC student with minimum 2.0 GPA OR ASU Online student with a minimum 2.00 GPA OR Graduate Mass Communications student; Credit for AFR or MCO 460 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MCO | 465 | Sports and Media | Designed for aspiring journalists and media users, explores why great sports journalism is essential to our society. Establishes the goals, dreams, and expectations for sports journalism and introduces ethical philosophy and popular ethical models and decision-making tools. Students then apply these tools to sports journalism. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 473 | Sex, Love, and Romance in the Mass Media | The role of the mass media in constructing and/or reinforcing unrealistic mythic and stereotypic images of sex, love, and romance. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | SB | Prerequisite(s): Journalism and Mass Communication major; minimum 2.50 GPA OR non-Journalism and Mass Communication major; minimum 2.00 GPA OR ASU Online student; minimum 2.00 GPA OR graduate Mass Communication major |
| MCO | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MCO | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | |
| MCO | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-6 | | Prerequisite(s): Barrett Honors student |
| MCO | 498 | Pro Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-7 | | |
| MCO | 502 | Journalism Skills | Teaches basic journalism skills for print, digital and broadcast. Students get significant hands-on practice writing and reporting stories on deadline as well as an immersion in the principles and practices of good journalism. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 8 | | Prerequisite(s): Master of Mass Communication or Sports Journalism MA major |
| MCO | 503 | Media Law | Examines philosophical and legal aspects of press freedom. Emphasizes First Amendment theory evolution from 1791 to present. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 505 | Depth Reporting | Teaches in-depth and investigative reporting and writing techniques. Students produce long-form, deeply sourced articles with the goal of publication. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication or Sports Journalism MA major |
| MCO | 510 | Data Journalism | Uses data to tell stories, negotiates with government officials for public records and uses the Internet and other online sources to find information and sources for stories. Uses computer spreadsheets, database software, mapping programs and statistical techniques and explores how these tools can be used across a wide variety of beats and stories. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 515 | Advanced Online Media | Covers online trends, Web design and usability, and copyright; legal, and ethical issues facing online journalists. Students critically examine journalistic Web sites and recognize excellence as well as mediocrity. Hands-on experience in using Photoshop, Dreamweaver, CSS, Soundslides, Final Cut, and Flash to produce original, compelling multimedia stories as well as an online magazine. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 525 | 21st-Century Media Organization and Entrepreneurship | Focuses on the future of journalism, the future of journalism business organizations and entrepreneurship, new media experiences, online solutions to popular media problems, financial realities of the media, and media innovation. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 526 | Advanced Issues in 21st-Century Sports and Media | Through critical analyses of major contemporary issues in sports and media, provides tools and information needed to more fully engage in and become fluent with the main conversations about the business, technology and the future of sports journalism. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major |
| MCO | 529 | Ethics and Diversity in Sports Journalism | Explores the connection among sports media, journalism and society in an ethical and issue-oriented context. Students gain an understanding of the issues and ethics of the sports journalism profession while becoming better and more informed consumers of sports media. At the end of the course students have a better understanding of the importance of sports in our society and how that is reflected in coverage by local and national media outlets. | N | SEM | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major; MCO 502 |

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| MCO | 530 | History, Philosophy, and Ethics of Journalism | Explores contemporary news media ethical problems in a seminar setting. Uses journalism ethical perspectives to obtain keys to unlock contemporary dilemmas surrounding the news media. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 531 | Advanced Broadcast Reporting | Teaches news and information practices of networks and local television stations. Students report, write and edit broadcast packages with an emphasis on video. | N | LEL | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication or Sports Journalism MA major |
| MCO | 535 | Latino and Transnational Issues | Provides background and understanding of some of the most pressing and controversial issues of the day that are taking place in the Southwest borderlands. Successful students move on to the Borderlands Initiative depth reporting project in the spring semester that includes an international reporting experience. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication or Sports Journalism MA major |
| MCO | 536 | Public Relations Research | Learns about the importance of research in communications, conducts research using qualitative and quantitative methods, and analyzes data to understand implications within a specific communications context. Critically evaluates published academic and professional research and exposes types of research and their application in the field of public relations. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Master of Mass Communication major. Credit is allowed for only MCO 536 or 598 (PR Research) |
| MCO | 540 | Sports Reporting | Sports reporting, writing, scriptwriting and video production. Fast-paced and demanding. Students report and write/produce professional-level, clear, well-reported, accurate stories and video packages about athletes and sports stories newsworthy in the Valley and beyond. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Sports Journalism MA major; MCO 502 |
| MCO | 550 | Issues in Coverage of Business and the Economy | Exposes the basics of business and economic reporting, one of the fastest-growing areas of journalism. Students learn what skills are needed to cover business and economic stories as well as the basics of how private companies operate and the factors that drive the economy. They also learn about opportunities in the field and hear from leaders in business journalism. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): ASU graduate online student OR Masters of Mass Communication major |
| MCO | 553 | Reporting on Business and the Economy | Trains students in the basics of reporting about business and the economy. Helps students tell the stories behind companies, people and money, while improving competence in using numbers in stories. Offers the opportunity to have stories appear in print, online or broadcast. | N | LEL | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): Master of Mass Communication major; MCO 502: Credit is allowed for only MCO 553 or 598 (Reporting on Business and the Economy) |
| MCO | 555 | Digital Media Entrepreneurship | Students identify a marketable idea and transform it into a product and/or company. In the process, they learn about key concepts of entrepreneurship and practice skills that they can employ as entrepreneurs themselves. Students are exposed to a range of national and regional entrepreneurs and emerge with a deeper understanding of entrepreneurship's importance within the media and communications landscape. | N | LEC | N | GNA | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Prerequisite(s): graduate Mass Communication major. Credit is allowed for only JMC 455, JMC 494 (Digital Media Entrepreneurship), MCO 555, or MCO 598 (Digital Media Entrepreneurship) |
| MCO | 560 | Arizona Media Law | Case study approach to first amendment issues, media access, libel, confidentiality, and invasion of privacy as applied to media organizations in Arizona. | N | LEC | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 570 | Master of Mass Communication Capstone | Master's degree hands-on culminating experience. Students may specialize in the various areas, i.e. print, broadcast, online, digital media, or public relations. | Y | LEL | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3-9 | | Prerequisite(s): Master of Mass Communication student |
| MCO | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MCO | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-4 | | Pre-requisite: Masters of Mass Communication student |
| MCO | 710 | Research Methodology in Mass Communication | Identifies research problems in mass communication and provides an overview of questionnaire construction as well as attention to survey, historical, content analysis, experimental and legal research methods. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism Mass Communication PhD students |
| MCO | 711 | Critical, Historical, Legal Research Methods in Mass Communication | Critical, legal and historical methods necessary to conduct qualitative mass communication research. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PhD student |
| MCO | 712 | Freedom of Expression Theory | Examines philosophical and legal aspects of press freedom; emphasizes First Amendment theory evolution from 1791 to present. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisite: Journalism Mass Communication PhD student |
| MCO | 720 | Mass Communication Theory | Analyzes various theoretic models of mass communication with emphasis on the applications of these theories to professional communication. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 722 | Philosophy of Mass Communication | Mass media as social institutions, particularly interaction with government and public; emphasizes criticism and normative statements. Seminar. Prerequisite: Journalism and Mass Communication PhD student. | N | SEM | N | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 3 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 755 | Research Apprenticeship | Students and faculty work on a research project with the expected outcome of a scholarly publication. | N | RSC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Pre-requisite: Journalism and Mass Communication PhD student |
| MCO | 765 | Teaching Apprenticeship | Assists PhD students with the transition from the industry to the classroom in order to become better university instructors. | N | REC | Y | OPT | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-2 | | Pre-requisites: Journalism and Mass Communication PhD student |
| MCO | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MCO | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Cronkite School-Journ/Mass Com | Walter Cronkite School of Journalism & Mass Comm | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MDC | 211 | Introduction to Digital Sound | Examines how technology is used as listeners, creators, critics, remixers, and a wide variety of other roles to participate in and gain a deeper understanding of music and its role in our lives. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for MDC 211 or MUE 294 Open Minds, Digital Ears |
| MDC | 311 | Composing and Performing for Hybrid Ensembles | Provides opportunities to perform music in a variety of digital and hybrid contexts using both physical and digital instruments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only MDC 311 or MUE 394 (Performing in Digital and Hybrid Music Groups) |
| MDC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MDC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MDC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MDL | 410 | Laboratory Leadership | Clinical lab leadership and management. Applies the principles of personnel management and supervision, allocation of resources, and staff communication. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite: Admission to Medical Laboratory Science program |

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| MDL | 420 | Advanced Clinical Urinalysis and Body Fluids | Theory and applications of principles in urinalysis with emphasis on the etiology, pathophysiology, and clinical manifestations of renal and other metabolic defects as reflected by the analysis of urine and other body fluids. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 421 | Advanced Practicum in Clinical Urinalysis and Body Fluids | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of urine and body fluids, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 420 with C or better |
| MDL | 430 | Advanced Hematology and Hemostasis | Theory and application of principles in hematology, with emphasis on techniques to evaluate blood dyscrasias and analyze body fluids. Etiology, pathophysiology, clinical manifestations, and treatment of blood dyscrasias/hemostatic defects. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; Admission to Medical Laboratory Science program |
| MDL | 431 | Advanced Practicum in Hematology and Hemostasis | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of blood samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| MDL | 440 | Advanced Immunohematology and Immunology | Theoretical and practical application of clinical immunology and immunohematology. Emphasizes serological techniques that aid disease diagnosis and blood donor selection. | N | LEL | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 182; MIC 205; Admission to Medical Laboratory Science program |
| MDL | 441 | Advanced Practicum in Immunohematology and Immunology | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis. | N | PRA | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 2 | | Pre-requisites: Medical Laboratory Sciences BAS major; MDL 440 with C or better |
| MDL | 450 | Advanced Clinical Microbiology | Theoretical and practical application of clinical microbiology. Emphasizes identification of pathogenic organisms, molecular techniques, mycology, virology, and parasitology. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 451 | Advanced Practicum: Clinical Microbiology | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 450 with C or better |
| MDL | 460 | Advanced Clinical Chemistry | Theoretical and practical applications of clinical chemistry with particular emphasis on correlation of test results to disease status, statistical analysis, pre-analytical testing, critical values, calibration, and trending and tracking of quality control results. | N | LEL | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: MDL 410; 420; 421; 430; 431; 440; 441 |
| MDL | 461 | Advanced Practicum: Clinical Chemistry | Correlation and application of theory in a supervised clinical laboratory. Processing, analysis, and evaluation of samples, emphasizing manual and automated techniques of specimen analysis routinely used clinical chemistry testing. | N | LAB | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: MDL 460 with C or better |
| MDL | 470 | Research Paper | Focuses on the creation of a research paper, written in a scientific fashion, on a relevant topic in the clinical laboratory field. | N | RSC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisite: MDL 460 |
| MDL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| MED | 100 | Introduction to Medical Studies | Presents basic concepts related to sciences, social sciences, humanities, statistics and other topics related to medical and health studies. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 1 | | |
| MED | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MED | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 417 | Impact of Violence on Health | Approaches violence from a public health perspective, using the Centers for Disease Control, National Center for Injury Prevention and Control, as a benchmark. Applies an interprofessional approach to violence, to include medicine, nursing, law, law enforcement, social work, psychology, economics and education, among others. Discusses principles of epidemiology, underlying etiologies and sequelae and evidence-based strategies for prevention throughout the course. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): minimum 45 hours |
| MED | 445 | Science of Helping in Health | One of the strongest weapons in the health care arsenal is helping people make healthier lifestyle choices. But this weapon is only effective when it results in sustained behavior change. Explores the complex interactions among genetics, biology, psychology and society that drive lifestyle choices and the science surrounding motivation and compliance in facilitating behavioral change. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): Minimum 45 hours |

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| MED | 450 | Leadership and Professionalism | Leadership, leadership theory and inter-professionalism in practice. Applies didactic content to case studies and activities designed to promote critical thinking and effective teamwork. Solidifies concepts through the use of assignments, exams and discussions. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Pre-requisite: HCD 100 or MED 100. Credit is allowed for only HCD 301 or MED 450 |
| MED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | Y | YGB | College of Health Solutions | College of Health Solutions | 1-12 | | Prerequisite(s): minimum 3.00 GPA |
| MED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | | Prerequisite(s): Barrett Honors student |
| MED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | PRA | N | Z1 | College of Health Solutions | College of Health Solutions | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| MED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-7 | | |
| MED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-3 | | |
| MEE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | |
| MEE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 322 | Structural Mechanics | Three-dimensional stress and strain analysis, generalized Hooke's Law, failure theories for ductile and brittle materials, combined loading, stress concentrations, energy methods, mechanical vibrations and structural dynamics, fatigue. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 4 | | Prerequisite(s): Mechanical Engineering BSE student; MAE 213 and 384 with C or better; MAT 267 or 272 with C or better; Credit is allowed for only AEE 325 (or MAE 325), MEE 322, or MAE 394 (Structural Materials in Aerospace) |
| MEE | 323 | Computer-Aided Engineering II | Introduces finite-element analysis, pre- and postprocessing, solving problems with FEA. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 2 | | Prerequisite(s) with C or better: BSE Aerospace Engineering major; AEE 325 (or MAE 325 or 394 Aerospace Structures and Materials); MAE 214 or BSE Mechanical Engineering major; MAE 214; MEE 322 (MAE 322) |
| MEE | 340 | Thermofluids II | Intermediate concepts of thermodynamics, fluid mechanics, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; MAT 267 or 272 with C or better; Pre- or corequisite(s): MAE 384 with C or better if completed |
| MEE | 342 | Principles of Mechanical Design | The design process; conceptual and embodiment design of mechanical elements; form synthesis; material selection, failure modes, manufacturability tolerances, common mechanisms and machine elements. | N | LEL | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 322 with C or better; MSE 250 with C or better; Pre- or corequisite(s): MAE 318 and MEE 323 with C or better if completed |
| MEE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 434 | Internal Combustion Engines | Performance characteristics, combustion, carburetion and fuel-injection, and the cooling and control of internal combustion engines. Computer modeling. | N | LEL | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 340 or MEE 482 with C or better; Credit is allowed for only MEE 434 or MAE 598 (Internal Combustion Engines) |
| MEE | 446 | Energy Systems Design | Applies mechanical engineering principles and techniques to modeling, analysis, and synthesis of energy systems and components. Design optimization. Design project. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Mechanical Engineering (Energy and Environment) BSE major; MAE 301 and 400 with C or better; MEE 340 and 342 and 482 with C or better |
| MEE | 482 | Thermodynamics | Applied thermodynamics; gas mixtures, psychrometrics, property relationships, power and refrigeration cycles, and reactive systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MAE 240 with C or better; Credit is allowed for only MAE 382 or MAE 570 or MAE 598 (Thermodynamics) or MEE 482 |
| MEE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-12 | | |

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| MEE | 488 | Mechanical Engineering Design I | Conceptual and embodiment design; modeling; rapid prototyping. Team project. MEE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Mechanical Engineering major; MAE 301 and 318 and 384 with C or better; MEE 340 and 342 with C or better; Pre- or corequisite(s): MAE 400 with C or better if completed |
| MEE | 489 | Mechanical Engineering Design II | Detail design; fabrication and testing. Team project. MAE 488 and 489 must be taken in consecutive semesters. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student; MEE 488 with C or better |
| MEE | 491 | Experimental Mechanical Engineering | Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student; MAE 301 and 318 with C or better; MEE 340 with C or better |
| MEE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | PRA | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MEE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MEE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-4 | | |
| MEE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-7 | | |
| MEE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Mechanical and Aerospace Engineering Program | 1-3 | | Prerequisite(s): minimum 45 hours |
| MET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 211 | Statics | Vectors, forces and moments, force systems, equilibrium, analysis of basic structures and structural components, friction, centroids, and moments of inertia. May be repeated for credit. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre/Co-requisites: PHY 121 (or PHY 111 as pre-requisite); MAT 265 or MAT 270 |
| MET | 212 | Applied Engineering Mechanics: Dynamics | Masses; motion kinematics; dynamics of machinery. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 211 (or CON 221 or MAE 212); MAT 266 (or MAT 271) |
| MET | 213 | Applied Mechanics of Materials | Stress, strain, stress-strain relations. Axial, shear, bending, torsional and combined loads and deflections. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 211 or CEE 210, or MAE 212 |
| MET | 214 | Applied Mechanics of Materials Laboratory | Measurements of loads and deformations relating stress and strain in axial, shear, bending, torsional, and combined loading configurations. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisites: MET 213, MAE 213, MSE 211, CON 223, CEE 213 OR be co-enrolled in MET 213 |
| MET | 230 | Introduction to Engineering Materials | Introduces materials and their properties, emphasizing basic concepts and structures and how these properties relate to manufacturing and design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 2 | | |
| MET | 231 | Manufacturing Processes | Design documentation and material processes on plastics, ferrous and nonferrous materials, emphasizing orthographic projection, geometric dimensioning and tolerances. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 160 and MET 230 |
| MET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 300 | Applied Material Science | Principles of materials science emphasizing concepts relevant to design, manufacturing, and use. Covers metals, polymers, ceramics, and composites. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR MSE 250 OR Applied Science (Manufacturing Technology & Management) major; MET 230 |
| MET | 302 | Welding Survey | Theory and application of industrial welding processes; introductory welding metallurgy and weldment design; SMAW, GTAW, GMAW, oxyacetylene, and brazing experiences. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): Fulton Schools of Engineering student |
| MET | 309 | Nondestructive Testing and Quality Assurance | Part and material inspection using metrology and nondestructive inspection tools and techniques. Theory and application with use of pertinent standards. | N | LAB | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 321 | Introduction to Automotive Engineering | Engineering principles and the design of ground vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): MET 212. Pre- or corequisite(s): MET 213, 340 |

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| MET | 331 | Machine Design I | Applies mechanics to design of machine elements and structures. Stress analysis, failure modes, tolerances, cylindrical fits, and shaft design. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 213 (or CON 223 or MAE 213) |
| MET | 340 | Engineering Thermo-Fluids I | First and second laws of thermodynamics, systems, processes, equations of state, property tables. Fluid statics, conservation of momentum, Bernoulli's equation, applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: PHY 112 or PHY 131; MAT 266 or MAT 271; Credit is allowed for only EGR or MET 340 |
| MET | 341 | Manufacturing Analysis | Organizational and functional requirements for effective production. Analysis of industrial specifications, geometric dimensioning and tolerancing, costs, and group technology. Writing assembly production plans. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 344 | Casting and Forming Processes | Analyzes various forming processes to determine load requirements necessary for a particular metal-forming operation. Information used to select equipment and design tooling. Metal casting processes and design of castings. Introduces powder metallurgy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 345 | Advanced Manufacturing Processes | Material removal processes emphasizing advanced turning, milling, and machinability studies using cutting tools. CNC programming for machining and turning centers. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EGR 218 OR EGR 294 (Engineering Materials & Manufacturing) OR MET 231 OR Applied Science (Manufacturing Technology & Management) major |
| MET | 351 | Introduction to Automation | Introduces automation. Topics include assembly techniques, fixed and flexible automation systems, robots, material-handling systems, sensors, and controls. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: EST 210 |
| MET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| MET | 396 | Professional Orientation | Topics related to a successful career in engineering technology industry. Includes safety, life-long learning, ethics, and career planning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 1 | | Pre-requisite: Junior or Senior standing |
| MET | 401 | Quality Assurance | Statistical quality control methods, design of experiments, sampling, gauge requirements and specifications, use of quality assurance tools. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: STP 420 (or APM 301); Credit is allowed for only MET 401 or 501 |
| MET | 409 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only MET 409 or 509 |
| MET | 410 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisite: MET 341; Credit is allowed for only MET 410 or 510 |
| MET | 415 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 341; STP 420; Credit is allowed for only MET 415 or 515 |
| MET | 416 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | CS | Pre-requisite: MET 341; Credit is allowed for only MET 416 or 516 |
| MET | 418 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300 or MSE 250. Credit is allowed for only MET 418 or 518 |
| MET | 421 | Vehicle Powertrains | Internal combustion engine design, performance and operation, and power transmission systems within vehicles. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321 |
| MET | 423 | Vehicle Chassis and Running Gear Design | Design and manufacture of chassis, structures, steering and braking systems and components, wheels and tires, suspension systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 321; MET 331 |
| MET | 424 | Vehicle Electrical Systems | Vehicle electrical power and signal systems, computer control and analog control systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210; MET 321; MET 421 |
| MET | 426 | Vehicle Thermal Design | Heat management in vehicle systems, including thermal design of engine and transmission cooling systems, cabin heating, and air conditioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 421; Pre/Co-requisite: MET 434 |
| MET | 427 | Vehicle System Integration and Testing | Systems engineering principles. Design of the interfaces between vehicle subsystems. Testing of integrated systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 423; MET 424 |
| MET | 432 | Engineering Thermo-Fluids II | Thermodynamic analysis of mixtures and power cycles. Design and analysis of fluid systems, conduction heat transfer, and introduction to convection and radiation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 or MAE 240; Credit is allowed for only EGR or MET 432 |
| MET | 434 | Engineering Thermo-Fluids III | Transient conduction, convection and radiation heat transfer, heat exchangers, thermo-fluid systems engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 435 | Alternate Energy Sources | Alternate energy systems, energy use and its impact on the environment, and demonstrating practical alternative energy sources to fossil fuels. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 340 |
| MET | 438 | Machine Design II | Applies mechanics to the design of machine elements and structures. Emphasizes basics of gears, springs, brakes, clutches, and bearings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: MET 331 OR Fulton Schools of Engineering graduate student |
| MET | 440 | Finite Element Analysis | Analyzes machine elements, frames, and aerospace structures employing finite element analysis and software. Includes sensitivity analysis and estimating accuracy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 331 |
| MET | 442 | Specialized Production Processes | Nontraditional manufacturing processes, emphasizing EDM, ECM, ECG, CM, PM, HERF, EBW, and LBW. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): EGR 218 (or EGR 294 [Engineering Materials & Manufacturing] or MET 231). Credit is allowed for only MET 442 or MET 502 |

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| MET | 443 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 345; Credit is allowed for only MET 443 or 514 |
| MET | 444 | Production Tooling | Design and fabrication of jigs, fixtures, and special industrial tooling related to manufacturing methods. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre- or corequisite(s): MET 309. Credit is allowed for only MET 444 or MET 504 |
| MET | 455 | Automation Systems Integration | Applies sensors and devices and their integration with PLCs and computers into automated devices and systems. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 351 |
| MET | 460 | Capstone Project I | Group project designing, evaluating, and analyzing components, assemblies, and systems. Develop products/manufacturing techniques demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 300; 331; 340; 345 |
| MET | 461 | Capstone Project II | Small-group projects applying manufacturing techniques, with emphasis on demonstrating state-of-the-art technology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: MET 460 |
| MET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| MET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | | Prerequisites: Fulton Schools of Engineering student; Minimum Junior status |
| MET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| MET | 501 | Statistical Quality Control Applications | SPC problem-solving techniques for implementation in industrial setting; design and analysis of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 401 or 501 |
| MET | 502 | Specialized Production Processes | Specialized production processes including lasers, electronic beam, abrasive and water jet, and chemical and thermal processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 442 or 502 |
| MET | 504 | Applications of Production Tooling | Design and fabrication of fixtures, jigs, templates, and specialized industrial tooling for manufacturing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 444 or 504 |
| MET | 509 | Applied Engineering Economics | Fundamentals of engineering economics in a practical, industry-based approach. Includes effects of depreciation, taxes, inflation, and replacement analysis. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; credit is allowed for only MET 409 or 509 |
| MET | 510 | Manufacturing Resource Management | Measures like cycle time, throughput, capacity, work-in-process, inventory, variability, and how they drive operating relationships in a factory. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 410 or 510 |
| MET | 514 | CNC Computer Programming | Theory and application of N/C languages using CAM software and CNC machine tools. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 443 or 514 |
| MET | 515 | Manufacturing Simulation | Computer simulation of manufacturing operations. Discrete event simulation models range from individual processes to whole factories. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 415 or 515 |
| MET | 516 | Applied Computer-Integrated Manufacturing | Techniques and practices of computer-integrated manufacturing as applied in a broad range of industry. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 416 or 516 |
| MET | 518 | Composites Materials Manufacturing | Introduces composite materials and associated manufacturing issues, including tooling, processes, and quality control. Related issues, including testing and joining. | N | LEL | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MET 418 or 518 |
| MET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| MET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | |
| MGT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 290 | My Life Venture | Interdisciplinary course that engages students in aspects of self-discovery and entrepreneurship. Students learn about themselves, their decisions, and their goals, and see how entrepreneurship could play a role in their lives. Introduces students to concepts in entrepreneurship and personal finance in the context of not-for-profit, business, political, and artistic realms. Includes both individual and team activities and is open to any ASU student. | N | LEL | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Credit is allowed for only MGT 290 or MGT 294 (My Life Venture) or WPC 294 (My Life Venture) |
| MGT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | |
| MGT | 300 | Organization and Management Leadership | Analyzes strategic, behavioral, and human resource management perspectives, including principles of strategic management and leadership of human resources. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s) with C or better: ACC 231, 232 or 261; ECN 221 or ECN 231 or IEE 380 or STP 280; MAT 211, 266 or 271; WP Carey, Engr Mgmt, Sec Ed (Bus) major or Business minor; Pre- or corequisite(s): ACC 240, 241, 242 or 271 with C or better if complete |
| MGT | 302 | Principles of International Business | Multidisciplinary analysis of international economic and financial environment. Operations of multinational firms and their interaction with home and host societies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: W. P. Carey BS or BA student (or non-business student with minimum 2.5 GPA and minimum 56 hours); ECN 212 or 214 with C or better; Credit is allowed for only AGB 302 or MGT 302 or BUA 394 Perspectives in Global Business |
| MGT | 303 | Honors Organizational Strategies, Leadership, and Behavior | Overview of business strategy principles, management processes, motivation, and leadership. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prerequisites: W.P. Carey School of Business. Honors student; PSY 101 (or PGS 101) or PSY 304 (or PGS 304) or SOC 101 or SOC 301 with C or better; ECN 221 or 231 with C or better. Pre- or corequisite: ACC 241 or 242 or 271 with C or better if completed |
| MGT | 310 | Collaborative Team Skills | Development of skills in managing and working in collaborative environments. Theories and applications in small group dynamics and team facilitation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student OR Non-business student with min 3.5 ASU cum GPA and min 56 earned hours. |
| MGT | 320 | Organizational Behavior | Management processes, fundamentals of business-level strategy, individual difference issues, motivation and leadership of people in organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites with C or better: ACC 241 (or ACC 242 or 271); ECN 221 (or ECN 231); MGT 300 (or MGT 303); PSY 101 (or PGS 101) or PSY 304 (or PGS 304) or SOC 101 (or SOC 301); BS Business Entrepreneurship or Management major |
| MGT | 340 | Creativity and Innovation | Teaches key concepts and useful tools and techniques of creativity and innovation to students in order to encourage development of creative skills and habits that can propel them in their career or guide them down a path to start a new venture of their own. Coursework and activities involve complex problem solving activities and relevant trend and environmental analysis in order to explore alternative approaches to challenges. Coursework includes both individual and team activities. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | L or HU | Pre-requisite: W. P. Carey BS or BA student OR non-business student with min 2.50 ASU cum GPA and min 56 earned hours and Pre/Co-requisite: MGT 290 or 294 My Life Venture; Credit is allowed for only MGT 340 or MGT or WPC 394 (Creativity and Innovation) |

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| MGT | 360 | Entrepreneurship and Value Creation | In-depth application of entrepreneurial concepts including opportunity recognition, value creation, and new business management. Students learn how to identify the needs of a market and problem solve to meet those needs through innovation. Students learn common mistakes made in the new venture process and how to work to avoid these mistakes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Prereq(s): Business undergrad; ACC 241 or 242 with C or better OR Engineering juniors OR non-business junior; min 2.50 cum ASU gpa; MGT 290 with C or better; Pre- or coreq(s): MGT 340 w/C or better if completed; Credit allowed only for FSE 301 or MGT 360 |
| MGT | 380 | Management and Strategy for Nonmajors | Introduces the functions and applications of management in organizations, including controlling, decision making, leadership, motivation, planning, and social responsibility. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: Non-business student with a minimum ASU cumulative GPA of 2.00 and a minimum of 56 earned hours, OR be a non-degree student with minimum 2.0 ASU cum GPA, OR be a graduate student. |
| MGT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey BS or BA student; Pre/Co-requisite: ACC 240 or ACC 241 or ACC 242 or ACC 271 with C or better |
| MGT | 400 | Cross-Cultural Management | Cultural role in international business relations; applied principles of cross-cultural communications, negotiations, and management; regional approaches to business relations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | C & G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better. |
| MGT | 404 | Chinese Language and Global Business Communication | Capstone course designed to synthesize the knowledge acquired from business, language and cultural coursework in the BA in Business: concentration in Chinese Language and Culture. Analyzes case studies in which Chinese language and cultural skills are used to develop communication strategies in doing business in China. Learn new tools and techniques of analysis to enhance communication with Chinese business counterparts. Applies language and cultural skills to a major project in which students demonstrate complex and integrated knowledge of negotiating with the Chinese and using global business skills. Integrates international business knowledge into presentations, research and the use of sophisticated tools of analysis to provide practical training for the global business environment. Students are proficient in communicating in Chinese prior to taking this course. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; CHI 302 with C or better; LES 305 with C or better; MGT 300 with C or better; SCM 300 with C or better |
| MGT | 405 | Spanish Language and Global Business Communication | Synthesizes the knowledge acquired from business, language and cultural coursework in the BA in Business: concentration in Spanish Language and Culture. Students proficient in communicating in Spanish analyze case studies in which Spanish language and cultural skills are used to develop communication strategies in doing business in Spanish-speaking countries. Students learn new tools and techniques of analysis to enhance communication with their Spanish-speaking business counterparts. Applies language and cultural skills to a major project in which students demonstrate complex and integrated knowledge of negotiating with Spanish speakers and using global business skills. Integrates international business knowledge into presentations, research and the use of sophisticated tools of analysis to provide practical training for the global business environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; LES 305 with C or better; MGT 300 with C or better; SCM 300 with C or better; SPA 314 with C or better |
| MGT | 410 | Responsible Management | Values, core beliefs, legal and ethical mandates and cultural norms as they apply to the conduct of organizations; application through a Service Learning project. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student, or non-business student with minimum 3.5 gpa and minimum 56 hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 411 | Leading Organizations | Comprehensive overview of leadership in organizations. Provides students with understanding of leadership research and its applications to global organizations and the development of leaders. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student or non-business student with minimum 2.50 ASU cum GPA and minimum 56 earned hours; MGT 300, 303, 320 or 380 with C or better |
| MGT | 420 | Human Resource Management | Development of skills and knowledge to lead associates effectively: hiring, developing, evaluating, retaining, and rewarding employees. Preparation for leadership roles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 3.5 ASU cum GPA and min 56 earned hours; MGT 300 or 303 or 320 or 380 with C or better |
| MGT | 421 | Compensation in Organizations | Develops knowledge of theory and research in motivation, compensation and rewards, and skill in applying such knowledge to important compensation and reward decisions. Discusses strategic compensation and reward systems issues. Explores in detail a variety of monetary and nonmonetary reward systems; the motivational impact these systems have on employees, teams, and CEOs; and the performance impact they have on organizations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 422 | Staffing | Focuses on the effective management of the flow of talent into and through organizations. Covers human resource planning, recruiting and selection, career transitions and other workforce movement. Provides opportunities to develop hands-on skills that are relevant to effectively managing talent flow. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |

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| MGT | 423 | Training and Development in Organizations | Familiarizes students with the training and development function in organizations. Although tailored to students interested in human resources management, the course may also be relevant to students who may at some point be involved in training and development within an organizational context. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 424 | Employment Law | Provides an overview of U.S. employment law at both the federal and state levels. Reviews employment at will and wrongful discharge, employment torts, privacy, discrimination law, worker's compensation, occupational safety and health, unemployment, federal compensation laws, and the law of noncompetition and trade secrets. Designed for individuals preparing for careers in human resource management, labor relations or dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 425 | Global Human Resources | Explores the importance of international business management in the context of international human resource management, including topics on culture, compensation and benefits, international organizations and their structures, international assignment management and the legal and regulatory considerations that global organizations face. Identifies differences in operating a domestic versus international business and how business practices need to be adapted to operate successfully in foreign markets. Covers global strategy and structure; understanding and managing cultural differences; design and alignment of global HRM practices; and the global HR function. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BA or BS major; MGT 420 with C or better |
| MGT | 430 | Negotiations | Improves student's understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. Give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. Emphasizes experiential learning--students spend most of their time participating in exercises and negotiation simulations, as well as discussing negotiation-based cases involving issues that often arise in the workplace. Provides a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: MGT 300 or 303 or 310 with C or better; W.P. Carey BS or BA student or non-business student with minimum 3.00 ASU cum GPA and minimum 56 earned hrs; Students with credit for MGT 494 topic 187 may not take MGT 430 |
| MGT | 440 | Entrepreneurship | Prepares students for the challenges of assembling and growing high-potential innovative ventures through the use of analytical frameworks that encompass uncertainty inherent in entrepreneurship (or in entrepreneurial activity). In-depth discussion of cases provides a strong empirical foundation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; FIN 300, 302 or 303 with C or better; MGT 300, 310 or 303 with C or better |
| MGT | 445 | Business Model Development | Develops a complete strategic business model emphasizing the planning process undertaken by successful small business owners and entrepreneurs. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisites: W.P. Carey BS or BA student; MGT 440 with C or better |
| MGT | 446 | Venture Capital Experience | Students learn the details of the startup funding process and available resources. Exposes the history of venture capital and other types of capital, current trends, and the trends that are anticipated in the future. Students learn due diligence process as performed by investors and applies these concepts to building and growing their own ventures. Coursework includes both individual and team activities and is open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Pre-requisite: W.P. Carey BA or BS student; ACC 240, 241 or 242 with C or better OR Non-business student; Minimum 2.50 GPA, Minimum 56 hours; Credit is allowed for only MGT 446 or 494 (Venture Capital Experience) |
| MGT | 447 | Lean Launch | Students learn lean and customer development methodologies to test assumptions made about a new business concept that they wish to explore or launch. Teaches how to effectively utilize business models and critically assess the assumptions made through the testing of hypotheses to create innovative and market-ready ventures. Includes weekly presentations of learning points and team activities outside of the classroom. Open to students in any major of study with the required prerequisite. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; ACC 241 or 242 or 271 with C or better OR Non-business student with minimum ASU 2.50 GPA; minimum 56 hours. Credit is allowed for only HON 447 or MGT 447 or MGT 494 (Lean Launch) |
| MGT | 450 | Consulting Projects | Describes and analyzes business processes. Generates and evaluates alternatives. Creates improvement and implementation plans. | N | PRA | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Prerequisite(s): W.P. Carey BS or BA major; ENG 301 or 302 with C or better; MGT 300 or 303; MGT 411 with C or better; MKT 300, 302 or 303 with C or better; Pre- or Corequisite: FIN 300, 302 or 303 (with C or better if completed) |
| MGT | 459 | International Management | Concepts and practices of multinational and foreign firms. Objectives, strategies, policies, and organizational structures for operating in various environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | G | Pre-requisites: WP Carey BS or BA student, OR non-business student with min 2.5 ASU cum GPA and min 56 earned hours; MGT 302 or ECN 306 with C or better |

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| MGT | 460 | Strategic Management | Systems theory of organizations, strategy formulation and administration in organizations, creating organizational cohesiveness, and leading change within organizations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 3 | L | Pre-requisites: W.P. Carey Management BS student; MGT 303 or 320 with C or better; MGT 410 or 411 with C or better; FIN 300, 302 or 303 with C or better; MKT 300, 302 or 303 with C or better |
| MGT | 464 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| MGT | 465 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| MGT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): W.P. Carey BA Human Resources or BS Business Entrepreneurship or BS Management major |
| MGT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | W.P. Carey School of Business | Department of Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MGT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey BS or BA student OR non-business with min 2.5 ASU cum GPA, min 2.5 ASU bus GPA and min 56 earned hrs; MGT 300 or 302 or 303 or 310 or IBS 300 with C or better |
| MGT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| MGT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-7 | | Pre-requisites: W.P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W.P. Carey BS or BA student OR non Business students with a minimum GPA of 2.50 and either at least 56 earned hours or non degree students OR Graduate students |
| MGT | 502 | Organization Theory and Behavior | Understands human side of organizations through management theories and applications. Develops knowledge and skills for successful management of self and others. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: Specific W.P. Carey students |
| MGT | 513 | Mindful Leadership | Provides a transformative experience that aids in developing skills associated with being a mindful leader. Focuses on introducing the concept of mindful leadership and explaining how to use it to achieve personal and professional goals. Then concentrates on using mindful leadership to lead individuals and teams. Specific learning goals include: (1) to enhance understanding of mindful leadership; (2) to improve skills in using mindful leadership to achieve personal goals; (3) to improve skills in using mindful leadership to lead individuals and teams; and (4) to propose a transformative plan aimed at increasing use of mindful leadership. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Prerequisite(s): W.P. Carey graduate student |
| MGT | 520 | High-Impact Leadership | Addresses the inherent ambiguity surrounding effective leadership by providing a toolkit of tangible behaviors to ensure leaders create "high impact" in all areas of their professional and personal lives. Emphasizes what high-impact leaders do differently and uniquely to achieve results while also inspiring loyalty in relationships. Covers core topics including building executive maturity and presence, developing and delivering compelling messages, inspiring those around you, building a strong relationship network, establishing credibility, and managing upward relationships. Includes peer dialogue, extensive presentation skills training, and assignments based on students' real-life leadership experiences. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 520 or 591 (High Impact Leadership) |

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| MGT | 530 | Negotiations | This course is designed to improve students' understanding of and skills in the art of negotiation. For most managers, negotiation is a significant aspect of their day-to-day jobs, not to mention a major element of everyday life. This course is designed to give students experience in bargaining and negotiation, as well as provide a foundation in the essential knowledge bases crucial to being an effective negotiator. The emphasis of the course is on experiential learning - students will spend most of their time participating in exercises and negotiation simulations (including negotiating job offers), as well as discussing negotiation-based cases involving issues that often arise in the workplace. The goal is to provide students with a fundamental understanding of what it takes to be an effective negotiator, as well as several experiences to draw upon in future negotiation situations. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 530 or 591 (Negotiations) |
| MGT | 540 | Entrepreneurship | Capstone case-based course covering all aspects of starting a business: opportunity identification, evaluation, concept development, identifying required resources, acquiring those resources, launching the entity, managing growth, and ultimately, harvesting the enterprise. Revolves around a series of cases, readings and class discussions designed to build a comfort level with understanding and solving problems faced every day, in real life, by a broad spectrum of entrepreneurs at various phases of venture development. Significant emphasis on understanding the valuation and financing of entrepreneurial ventures interwoven through discussions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: ACC 502 and FIN 502 with C or better; W.P. Carey School of Business graduate student; Credit is allowed for only MGT 540 or 591 (Entrepreneurship) |
| MGT | 545 | Becoming Leaders Who Matter | Addresses core questions: What does it mean to be a leader who really matters? How can you become such a leader? Today's competitive and complex environment requires leaders who are equipped with not just the functional and technical skills necessary to run a business but, more significantly, the leadership skills that allow the business and the people involved in it to thrive. Provides an opportunity to reexamine thinking about leadership and assess current skills and competencies in this area. Highly interactive learning environment with case analyses, exercises, discussion, guided reflection activities, assessments and group work. Covers topics such as self awareness (motivations, values, and leadership style), developing perspective as leaders, the social context of leadership, the role of emotions in the workplace, using life experiences to extract leadership lessons. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 545 or 594 (Leading w/Authenticity & EI OR Becoming Leaders Who Matter) |
| MGT | 550 | Toxic Leadership and Dysfunctional Organizations | Examines origins and impact of bad behavior in the workplace. Identifies and investigates dysfunctional organizational policies and toxic leadership practices. Case studies and consultation reports provide students with detailed accounts of destructive leaders motivated by or responding to greed, questionable ethics, organizational and marketplace pressures, crisis and psychopathology. Students learn best practices for early detection of toxic leadership and organizational dysfunction and strategies for positive intervention and transformation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisite: W.P. Carey School of Business graduate student; Credit is allowed for only MGT 550 or 591 (Toxic Leadership and Dysfunctional Organizations) |
| MGT | 559 | International Management | Studies international and cross-cultural influences on management processes and development of global leadership capabilities for experienced management professionals. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 1-3 | | Pre-requisites: W.P. Carey Graduate student |
| MGT | 565 | Business Strategy and Public Policy | Takes a managerial perspective to examine the interface between businesses and their external political environments. Potential changes in public policy can affect current operations and future opportunities. Examines how managers can anticipate and affect the formation, modification and enforcement of public policy in various institutional environments. | N | LEL | Y | GNA | W.P. Carey School of Business | Department of Management | 1-4 | | Prerequisite(s): W.P. Carey MBA Executive Program or W.P. Carey School of Business graduate student; Credit is allowed for only MGT 565 or MGT 591 (Business and Public Policy) |
| MGT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 588 | Strategic Leadership | Explores the general manager as organizational leader. Focuses on competitive advantage and how each functional area contributes to it. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: MBA degree student |
| MGT | 589 | Strategic Management | Formulation of strategy and policy in the organization, emphasizing the integration of decisions in the functional areas. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Management | 2-4 | | Pre-requisites: MBA degree student |

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| MGT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Pre-requisites: Graduate W.P. Carey students |
| MGT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: MBA degree student |
| MGT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 0-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MGT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MGT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Management | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MGT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Management | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 140 | Music as Culture | Introduces a range of practical and intellectual challenges presented by encounters with various kinds of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisites: Music major |
| MHL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 201 | Media Literacy for Musicians | Instruction in basic Macintosh computer literacy, including generic applications and music-specific programs with hands-on experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | CS | |
| MHL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |

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| MHL | 341 | Music History I | Western European art music from Antiquity through Baroque. Identification/analysis through listening; application of historical and analytical concepts; research project comprising fresh thesis, detailed musical research, personal reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major: MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major: MTC 223 with C or better |
| MHL | 342 | Music History II | Western European, American art music from Classical period to present. Identification/analysis through listening; transfer/application of music/analytical concepts; research project comprising fresh thesis, insightful musical research/reflection, fluent English writing, correct citation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: Music Education, Music Therapy or BA major: MTC 221 with C or better OR Non-Music Education, Music Therapy or BA major: MTC 223 with C or better |
| MHL | 344 | Music in World Cultures | Examines the relations among music, dance, theatre, religion, and social status in Asia, Africa, Oceania, Europe, and the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | |
| MHL | 363 | Survey of Russian Music | Examines music and musical life in Russia, the Soviet Union, and the post-Soviet C.I.S. from the Middle Ages to the present. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): Music student; MHL 342 with C or better |
| MHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MHL | 437 | Music in the Baroque Era | Examines music, culture and aesthetics in the 17th and early 18th centuries. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): Music major or minor; minimum 45 hours. Credit is allowed for only MHL 437 or MHL 494 (Topics in Baroque Music) or MHL 494 (Music in the Baroque Era) |
| MHL | 438 | Topics in 18th-Century Music | Selected topics exploring the musical styles of the 18th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 439 | Topics in 19th-Century Music | Selected topics exploring the musical styles of the 19th century and their cultural contexts. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | L & H | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with C or better |
| MHL | 440 | Music Since 1900 | Examines stylistic trends, major composers and their works, and cultural contexts in music since 1900. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L or HU | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 223 with a C or greater |
| MHL | 456 | History of Opera | Development of opera from its creation ca. 1600 to present. Emphasis placed on major stylistic developments and representative works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 222 with C or better |
| MHL | 466 | North American Indian Music | Various styles of Indian music in the United States, Canada, and Mexico. Open to Music majors and nonmajors. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | (L or HU) & C | |
| MHL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MHL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Music student; MHL 341 with C or better; MHL 342 with C or better; MTC 222 with C or better |
| MHL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MHL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |
| MHL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MHL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 532 | Music Bibliography | Major historical and analytical writings; systematic and historical collections of music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music student |
| MHL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MHL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |

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| MHL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisites: Graduate Music student |
| MHL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisites: Graduate Music student |
| MHL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 632 | Applied Musicology | Explores practice-oriented entrepreneurial opportunities and methods in musicology, acquires knowledge and develops skills in community engagement and outreach, explores pathways of professional publication and network building, and participates in organizing curated concert series and scholarly conferences. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): MHL 532 |
| MHL | 657 | Topics in Symphonic Literature | Examines the evolution of the symphony and symphonic poem from the early classic era through the 19th century, with emphasis on the analysis of selected works. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 668 | Introduction to Ethnomusicology | Experiencing theory and methodology by being ethnomusicologists through musical performance, primary writings on fieldwork, career structuring, the history of the discipline, its relationship with historical musicology, and the cultural theories which ethnomusicologists draw on. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 670 | Area Studies in Ethnomusicology | Study of the music of a particular culture, country, or area (e.g., music of Mexico, Latin America, China, Africa). | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 675 | History of Choral Music and Institutions | Examines the history of choral music through the lens of choral institutions: patronage, education, ritual, performing forces, status (professional vs. amateur), and locale. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MHL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MHL | 798 | Research Colloquium | Interactive research forum featuring research presentations and discussion among musicology students, faculty and guest speakers from across campus and other institutions. Encourages students to engage in constructive dialogue with their peers as well as with faculty and guest speakers in a collegial environment conducive to exchange and collaboration. Supervised by a faculty panel from the musicology division. | N | RSC | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): MSI 601 or 602 |
| MHL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIC | 205 | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | 205 | Microbiology | Introductory microbiology, emphasizing basic principles of microorganisms (bacteria, protozoa, algae, fungi, and viruses) and the role they play in health, ecology, and applied fields. May not be used for Microbiology credit unless a diagnostic test is passed. Both MIC 205 and MIC 206 required for SG General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | SG | Pre-requisite: CHM 101 or 113 |
| MIC | 206 | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | 206 | Microbiology Laboratory | Principles and lab techniques used in identifying and handling microorganisms. Both MIC 205 and 206 must be taken to secure SG General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | SG | Pre/Co-requisite: MIC 205 or MIC 220 (with a C or better if completed) |
| MIC | 220 | Biology of Microorganisms | Introductory microbiology for students majoring in the life sciences. Detailed study of microbial cells, their structure, genetics, physiology, and taxonomy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 181 or 282; CHM 116 |
| MIC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 302 | Advanced Bacteriology Laboratory | Advanced lab techniques in bacterial growth, physiology, and genetics, with an emphasis on quantitative data and formal lab reports. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | L | Pre-requisite: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| MIC | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |
| MIC | 360 | Bacterial Physiology | Mechanisms and control of cell metabolism, structures, and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 379 | Medical Bacteriology | Principles of medical bacteriology with emphasis on bacterial infections, diagnostic testing, clinical symptoms, pathogenesis, and treatments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 |
| MIC | 380 | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 380 | Medical Parasitology | Parasitic diseases of humans, including life cycle events and clinical manifestations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MIC 220 with C or better |
| MIC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 401 | Research Paper | Paper of 15 or more pages based on library or lab research in collaboration with a faculty member. Required of all Microbiology majors. Both MIC 302 and 401 must be taken to secure L General Studies credit. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | L | Prerequisite(s): MIC 206, 220 with C or better; senior standing |
| MIC | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |
| MIC | 420 | Immunology: Molecular and Cellular Foundations | Antibody/antigen interactions, cellular response, cytokines, immunogenetics, immunoregulation, autoimmunity, psychoneuroimmunology research/medical perspectives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353, BIO 360 or MIC 220 with C or better |

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| MIC | 421 | Experimental Immunology | Introduces the basic techniques, methods, and assays used in immunology. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre-requisite: MIC 220, MBB 247, BIO 353 or BIO 360 with C or better |
| MIC | 425 | Advanced Immunology | Surveys recent advances in immunology, including lymphocyte membranes, lymphokines/biochemistry, molecular genetics, theoretical immunology, immunoregulation, neuroimmunology, and immunologic diseases. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420 with C or better |
| MIC | 426 | Medical Immunology | Concepts and clinical applications of medical immunology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: BIO 181 (or BIO 188 or MBB 247) and BIO 182 (or BIO 187 or MBB 245) and BIO 353 with C or better |
| MIC | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisite: MIC 420, PSY 325, PSY 425, BIO 353, BIO 462, or BIO 467 with C or better; Credit is allowed for only MIC 427 or PSY 427 |
| MIC | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 420, PHI 317, HPS 314, or PHI 428 with C or better; Credit is allowed for only MIC 428 or PHI 428 |
| MIC | 441 | Bacterial Genetics | Surveys genetic exchange and regulatory processes in bacteria and their viruses. Bacteria and viruses as tools in genetic engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or MBB 347 with C or better; MIC 220 with C or better |
| MIC | 442 | Bacterial Genetics Laboratory | Techniques of mutagenesis, mapping, and strain and genetic library construction. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre/Co-requisite: MIC 441 |
| MIC | 443 | The Microbial Universe | Diversity and physiology of microorganisms with emphasis on recent advances in the biology of microorganisms of environmental and medical importance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: BIO 353 (LSC 353) with C or better; Pre/Co-requisite: MIC 444 (LSC 445) (with C or better if completed); Credit is allowed for only MIC 205 or 443 |
| MIC | 444 | The Microbial Universe Laboratory | Techniques used to explore the microbial universe with emphasis on structural, metabolic, genetic, and growth characteristics relevant to the identification and characterization of microorganisms of environmental and medical importance. Not open to students with credit in MIC 206. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | | Pre-requisite: LSC 444 or MIC 443 with C or better or co-enrolled in MIC 443 |
| MIC | 445 | Techniques in Molecular Biology/Genetics | Molecular genetic principles: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Prerequisite(s): BIO 340 or MBB 347 with C or better; MBB 247 or MIC 302 with C or better; Credit is allowed for only MBB 445 or MIC 445 |
| MIC | 446 | Techniques in Molecular Biology/Genetics Lab | Molecular genetic techniques: plasmid construction, purification, and characterization; PCR; mutageneses; hybridization and sequence analysis; protein quantitation; immunologic detection, and electrophoresis. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 2 | | Pre/Co-requisites: MBB 445 or MIC 445 (with C or better if completed); Credit is allowed for only MBB 446 or MIC 446 |
| MIC | 461 | Geomicrobiology | Past and present interactions among microbial life, geological materials, and biogeochemical cycles involving carbon, sulfur, phosphate, nitrogen, and metals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| MIC | 470 | Bacterial Diversity and Systematics | Biology, classification, and enrichment culture of the nonpathogenic bacteria. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: MIC 302 with C or better |
| MIC | 475 | Astrobiology | Origin, early evolution, distribution, and future of life on Earth and elsewhere in the cosmos. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite with C or better: AST 112 (or BIO 182 or BIO 282 or GLG 102 or SES 122), one 300-level course in AST or BIO or CHM or GLG or MIC or PHY or SES. Credit is allowed for only AST 460 or GLG 460 or MIC 475 |
| MIC | 481 | Bacterial Pathogenesis | Human host-bacterial interactions in infectious diseases with emphasis on pathogenesis and molecular mechanisms of bacterial virulence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisite: MIC 220 with C or better; MIC 360 or MIC 441 with C or better |
| MIC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| MIC | 485 | General Virology | Fundamental principles of viruses, their molecular biology, replication, genetics, and pathogenesis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: MIC 206 with C or better; MIC 220 with C or better |
| MIC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| MIC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| MIC | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| MIC | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or Senior standing; Credit is allowed for only BIO, MBB, MIC, HPS or PLB 496 |
| MIC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MIC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MIC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| MIC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 520 | Evolution and Ecology of Emerging Infectious Diseases | Applying principles and concepts from Ecology, Evolution, and Epidemiology for studying emerging infectious diseases. Emphasizing the interplay of these areas. Intended for life sciences majors and first year graduate students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only EVO or MIC 520 |
| MIC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MIS | 101 | Introduction to the Military I | Overview of mission, organization, and structure of the Army and its role in national defense; discussion of current military issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |

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| MIS | 102 | Introduction to the Military II | Introduces problem-solving methods, critical thinking, decision making, and group cohesion as applied in a military environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 hours |
| MIS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 201 | Introduction to Leadership Dynamics I | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 202 | Introduction to Leadership Dynamics II | Introduces interpersonal dynamics involved in military team operations; theory and application of military leadership principles. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 205 | Leader's Training Course | 6-week training program emphasizing practical hands-on skills and leadership development. Taken in lieu of MIS 101, 102, 201, 202. Conducted at Fort Knox, Kentucky. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 301 | Advanced Military Science I | Theory and dynamics of the individual soldier and military units in offensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |
| MIS | 302 | Advanced Military Science II | Theory and dynamics of military units in defensive combat operations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | L | |
| MIS | 303 | National Advanced Leadership Camp | 6-week training program emphasizing leadership development and advanced military skills, including tactics, land navigation, and physical training. Conducted at Fort Lewis, Washington. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 4 | | |
| MIS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 401 | Advanced Military Science III | Military legal system; preparation and conduct of military training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 402 | Advanced Military Science IV | Military correspondence; career planning and personal affairs in service; conduct of training; leadership development; ethics and professionalism of the military officer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | | |
| MIS | 410 | American Defense Policy I | Evolution, organization, and execution of U.S. national security policy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 412 | American Defense Policy II | Contemporary problems and analytical issues in the formation and implementation of U.S. national security. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Military Science | 3 | SB & G & H | |
| MIS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-12 | | |
| MIS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MIS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-4 | | |
| MIS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Military Science | 1-7 | | |
| MIS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Military Science | 1-3 | | |
| MIS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Military Science | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-3 | | |
| MKT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | |
| MKT | 300 | Marketing and Business Performance | The dynamic role of marketing within society and organizations. Emphasizes frameworks and analytical tools that ensure customer focus and drive organizational performance. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Marketing W.P. Carey BA or BS or non-business major with minimum 2.50 ASU GPA and minimum 56 hours; ECN 211, 212, 213, or 214 with C or better. Credit is allowed for only MKT 300 or MKT 301 (Fundamentals of Marketing) |

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| MKT | 302 | Applied Marketing Management and Leadership | Market planning, execution, and assessment. Emphasizes decision and communication skills related to market opportunity analyses and marketing program development as a core business function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W.P. Carey Marketing BS major; ECN 221 or 231 with C or better; MAT 211 with C or better. Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed |
| MKT | 303 | Honors Marketing Theory and Practice | Covers basic applications of marketing concepts to problems that are common to marketing managers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W.P. Carey Honors student; ECN 221 or 231 with C or better; MAT 211 with C or better; Pre- or corequisite(s): ACC 241 or 242 or 271 with C or better if completed; Credit is allowed for only MKT 300 or MKT 302 or MKT 303 |
| MKT | 311 | Sports Business | Focuses attention on components ranging from professional sports to collegiate sports, as well as sports-related products. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA major; minimum 56 hours |
| MKT | 352 | Marketing Research | Knowledge and skills to make intelligent decisions in the design, evaluation and application of marketing research and market data. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | L | Prerequisite(s): W. P. Carey Marketing student; MKT 302 or MKT 303 with C or better |
| MKT | 365 | Advertising Management | Advertising as a communications tool in marketing and business. Consideration of market segmentation and positioning, creative strategy, media management, and metrics of effectiveness. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BS student; MKT 300, 302 or 303 with C or better |
| MKT | 370 | Professional Sales and Relationship Management | Investigate the vital role of sales, its relationship to other functions within the firm, and its impact on customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 300 or 302 or 303 with C or better; W.P. Carey BA or BS major, or non-business major with minimum 2.50 ASU GPA and minimum 2.50 ASU business GPA and minimum 56 hours |
| MKT | 390 | Essentials of Marketing | Focuses on the nature and processes of marketing with an emphasis on practical application. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business student; Minimum ASU cumulative GPA of 2.00; Minimum 56 hours OR Non-degree OR be a Graduate student (degree seeking or nondegree seeking) |
| MKT | 391 | Essentials of Selling | Focuses on the selling process and its practical applications within consumer and business markets. Not open to business majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |
| MKT | 392 | Essentials of Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): Non-business student, and minimum cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a graduate student |
| MKT | 395 | Essentials of Advertising and Marketing Communication | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisite: W. P. Carey BA student or non-business student, and minimum ASU cumulative GPA of 2.00, and minimum 56 hours OR be a Non-degree student with minimum 2.0 ASU cum GPA OR be a Graduate student; Credit is allowed for only BUA 382 or MKT 394 |
| MKT | 396 | Essentials of Services Marketing | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; OR BA Business(Retail Management) major OR Nondegree-seeking student; OR Graduate student (degree seeking or nondegree seeking) |
| MKT | 397 | Essentials of Global Marketing | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in the student's home country and marketing globally. The rapid adoption of technology has fundamentally changed the dynamics of marketing and created new competitive paradigms that must be understood for firms to be successful. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 398 | Essentials of Sports Business | Introduces the concepts of sports business. Builds knowledge, skills and understanding of the fundamentals of sports business. Develops an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and how they impact sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): Non-Business major; Minimum 2.00 ASU cumulative GPA; Minimum 56 hours; MKT 390 with C or better; or Non-degree seeking undergraduate or Degree seeking or Non-degree seeking graduate student |
| MKT | 402 | Consumer Behavior | Applies behavioral concepts in the analysis of consumer behavior and the use of behavioral analysis in marketing strategy formulation. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey Marketing student; MKT 352 with C or better |
| MKT | 410 | Sales Management | Constructive investigation of selling processes, their application in business and consumer contexts, and management of the sales function. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey BA or BS major; MKT 300, 302, or 303 with C or better |
| MKT | 420 | Retail Management | The role of marketing in retailing and retail performance. Challenges and processes of retail management across various institutions. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA Business (Retail Management) major; MKT 300 or 302 or 303 with C or better |

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| MKT | 421 | Fan Behavior and Sports Marketing | Focuses on what it means to be a consumer in a sports marketing context society and what, as a marketer, you need to know to develop, evaluate and implement effective marketing strategies for fans. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; Pre- or corequisite(s): MKT 300 or 302 or 303 with C or better if completed |
| MKT | 425 | Global Marketing Management | Analyzes marketing strategies and practices developed by firms to compete in global markets and adapt to changing international environments. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | G | Prerequisite(s): W.P. Carey BA or BS major, or non-business major with minimum 2.50 ASU cum GPA and minimum 2.50 ASU business GPA and 56 earned hours; MKT 300 or 302 or 303 with C or better |
| MKT | 430 | Sports Business | Builds knowledge, skills, and understanding of sports business; exposure to leading-edge thought, methods, and practices in sports business. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BS student; must have completed MKT 300, MKT 302 or MKT 303 with a grade of C or better. |
| MKT | 431 | Sports Events and Facility Management | Project-based course that encompasses the administration, coordination and evaluation of any type of event related to sports. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; Pre- or corequisite(s): MKT 300 or 302 or 303 with C or better if completed |
| MKT | 435 | Entrepreneurial Marketing | Identifies and evaluates marketing opportunities; motivates an appreciation of entrepreneurial marketing and its different environmental contexts for general marketing principles. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W. P. Carey BA or BS student; MKT 300, MKT 302, or MKT 303 with grade of C or better. |
| MKT | 440 | Digital Marketing in Practice | Puts digital marketing into practice, expanding on the foundations learned from other marketing courses. Covers strategy and planning but focuses on practical application. Designed to jump start the learning process for any student interested in marketing goods and services in contemporary society. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 440 or 494 (Digital Marketing in Practice) |
| MKT | 441 | Sports Revenue Generation | Focuses on selling and how to create, maintain and build relationships within the sports context. Students gain knowledge and develop skills in choosing a sales career including attributes of a sales person, sales call preparation, value propositions, creating value for the client, team selling, questioning and listening techniques, negotiating, persuasion and closing techniques. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey BA or BS major; Pre- or corequisite(s): MKT 300 or 302 or 303 with C or better if completed |
| MKT | 442 | Services Marketing Strategy | Concepts, skills, and strategies for addressing the imperative marketing challenges and opportunities involving service. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing major; Minimum 2.50 GPA; Minimum 56 earned hours; MKT 302 or MKT 303 AND MKT 352 with C or better; Pre/Co-requisite: MKT 402 |
| MKT | 450 | Social Media and Content Marketing | Centers on how to effectively use social media and content marketing to build relationships between a company and its customers. Students learn to create content, how to deliver content through social media and community management, as well as how to optimize content for maximum effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 450 or 494 (Social Media Mktg and Com Mgmt) |
| MKT | 452 | Business-to-Business Marketing Strategy | Concepts, skills, and strategies for performing competitively in the business market where organizations rather than households are the customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): MKT 302 (or MKT 303), 352 with C or better; W.P. Carey Marketing major with minimum 2.50 ASU GPA, minimum 2.50 ASU business GPA and minimum 56 hours. Pre- or corequisite(s): MKT 402 |
| MKT | 455 | Brand Management | Focuses on understanding brand management and the concepts associated with building brand equity and managing brand identity and positioning. Students learn how firms create a competitive advantage by incorporating consumer insight into an effective branding strategy. In addition, students gain an understanding of the role of branding on product portfolio management. Heavily features case discussion, projects and real brands. Applies brand management knowledge to an actual branding strategy project for a small firm. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W. P. Carey Marketing major; MKT 302 (or 303) with C or better; Credit is allowed for only MKT 455 or 494 (Brand Management) |
| MKT | 460 | Sports Revenue Generation | Focuses on providing a sophisticated understanding of revenue generation in the context of sports. Students gain knowledge of key marketing, management and administrative functions that play a critical role in revenue-generation strategies. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey BS major; MKT 300 (or 302 or 303) with C or better |
| MKT | 462 | Competitive Marketing Strategy | Strategy formulation and decision making by the marketing executive. Integrates marketing programs and considers competitive marketing issues. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Pre-requisites: W.P. Carey Marketing student; MKT 302 or (MKT 303 and MKT 352) with C or better; Pre/Co-requisite: MKT 402. |
| MKT | 465 | Projects in Sports Business | Focuses on providing students with an innovative opportunity to work directly with sports business industry professionals to address real-world and real-time issues faced by these organizations. Students develop an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and of their constantly changing and interactive impact on sports business practice and performance. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): W.P. Carey Sports and Media Studies BA major or W.P. Carey BS major; MKT 300 or 302 or 303 with C or better; MKT 311 or 430 with C or better |
| MKT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): W.P. Carey BA or BS major; MKT 300 or 302 or 303 with C or better |
| MKT | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |

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| MKT | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | W.P. Carey School of Business | Department of Marketing | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MKT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W. P. Carey BS or BA student; MKT 300 (or 302 or 303) with C or better |
| MKT | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | IND | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-6 | | Prerequisite(s): Barrett Honors student |
| MKT | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-7 | L | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |
| MKT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-3 | | Pre-requisites: Business students with professional status or non-business students with a minimum cumulative GPA of 2.50 and 56 earned hours |
| MKT | 502 | Marketing Management | Managing the marketing function; market and environmental analysis; marketing planning, strategy, and control concepts. Development and management of marketing programs. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: Specific W.P. Carey Graduate students only |
| MKT | 520 | Services Marketing and Management | Focuses on challenges of managing service brands and delivering quality service to customers across industry sectors. Emphasizes skills and knowledge needed to implement quality service and service strategies, frameworks for customer-focused management, and how to increase customer satisfaction and retention through service strategies. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 525 | Excel in Services | Focuses on challenges of managing services and delivering quality service to customers. The attraction, retention, and building of strong customer relationships through quality service (and services) are at the heart of the course content. The course is equally applicable to organizations whose core product is service and to organizations that depend on services for competitive. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 530 | Creativity and Innovation | Multidisciplinary approaches to theories and practices of inspiring and managing innovation and change for sustainable competitive advantage. Focuses on both the student's individual creativity and the planning and implementation of innovations, technologies, processes, or systems that pose significant uncertainty. Places special attention on the processes surrounding understanding the consumer, ideation and implementation. Inclusive in this are methods such as environmental scanning, scenario planning, contextual research, storytelling, concept testing and prototyping. Also includes the many aspects of the organization's structure and culture regarding innovation and creativity. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 535 | Global Marketing Strategy | Introduces the concepts of globalization in markets and gives an appreciation and understanding of the differences between marketing in a home country and marketing globally. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 540 | Consumer Markets and Brand Strategy | Provides an intensive examination of factors that drive consumer behavior. Covers topics such as understanding factors contributing to a superior value proposition, identifying elements associated with the stability of the existing alternative, specifying components linked to reducing the level of uncertainty associated with the new alternative; articulating independent influences (e.g., regulatory and social) operating in a particular change context, and comprehending biases that exist in the search and decision making process. Also places additional emphasis on brand development as well as on the role that social media assumes in the change process. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 545 | Entrepreneurial Marketing | Introduces the process of developing a plan for starting a business and presenting that plan to potential investors in order to obtain financing. Covers the purposes of a business plan, the varying objectives of different types of investors or financial institutions, and how they complement or conflict with the interests of an entrepreneur. Topics include proprietary positioning, types of organization, and differing management objectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 550 | New Product and Service Development | Intimately familiarizes students with the front end of the new product design process and provides concrete tools for determining strategies for developing new products based on input from customers. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 555 | Business-to-Business Marketing | Provides the tools and specialized knowledge for developing and executing marketing strategy in the business-to-business market. Covers how to identify forces that drive buying behavior in organizations, measure market opportunity, identify profitable segments, and develop strategy, particularly for turbulent, high-technology markets. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 560 | Customer Relationship Management | Focuses on the tools, metrics, and systems used to measure and manage customer relationships. Key to the development and use of sound customer metrics are market research skills including competencies in research design, sampling, measurement, data collection, and data analysis. Covers how to use types of data such as surveys, purchased data, transactional data, the Web, and social media to measure and manage customer relationships. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 570 | Advanced Marketing Strategy | Covers strategic marketing concepts (portfolio management and resource allocation, market segmentation and positioning, competitive advantage); marketing tools (perceptual mapping, conjoint analysis, portfolio analysis, regression); and market and competitive analysis (analyze changes in market attractiveness, evaluate different courses of action, plan long term). | N | LEC | N | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | GNA | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W. P. Carey MBA Full Time student. |
| MKT | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: Global Management Graduate student; MKT 502 with C or better |
| MKT | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MKT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| MKT | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Marketing | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| MKT | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | W.P. Carey School of Business | Department of Marketing | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MKT | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Marketing | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-7 | | |
| MLS | 501 | Writing about Social Issues: Culture, Gender, Society, and Well-Being in the Southwest | Reading and discussion of nonfiction writing on social issues that integrate cultural, gender, and societal issues that affect the well-being of urban communities with special attention to the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 502 | Religion, Culture, and Health: Where Cultures Intersect | Focuses on how cultural and religious notions may come into conflict around issues of health. Contrasts two societies, not necessarily contemporary, from different continents. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 503 | Ethics, Science, and Culture | Introduces ethics related to the practice of art, science, and medical practice in modern and premodern society. | N | LEC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 504 | Film Analysis | Introduce formal and cultural issues important to understanding movies. | N | REC | N | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 3 | | Pre-requisite: Master of Liberal Studies student OR MAS in American Media and Popular Culture student. Credit is allowed for only FMS or MLS 504 |
| MLS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-12 | | Pre-requisite: Master of Liberal Studies student |
| MLS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MLS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Dean, College of Liberal Arts and Sciences | 1-4 | | Pre-requisite: Master of Liberal Studies student |
| MND | 101 | First-Year Chinese I | Beginning course in Modern Standard Chinese designed for students who have little or no previous background in the language. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, also includes cultural information that go along with language use. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Credit is allowed for only CHI 101 or MND 101 |

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| MND | 102 | First-Year Chinese II | Beginning course in Modern Standard Chinese designed for students who have completed MND 101. Different pedagogical approaches such as group practice, role play and situational dialogues are designed to help students acquire basic skills in listening, speaking, reading and writing in Modern Standard Chinese. While linguistic elements are the focus of this course, also includes cultural information with application to global business communication. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; Credit is allowed for only CHI 102 or MND 102 |
| MND | 201 | Second-Year Chinese I | First part of a two-semester course of intermediate Modern Standard Chinese for students who have successfully completed First-Year Chinese I and II. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing. While linguistic elements are the focus of this course, also includes cultural information that accompanies language use along with a deep emphasis on global work situations. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; MND 102; Credit is allowed for only CHI 201 or MND 201 |
| MND | 202 | Second-Year Chinese II | Second part of a two-semester course of intermediate Modern Standard Chinese for students who have successfully completed three semesters of Modern Standard Chinese at the college level or equivalent. Builds on the vocabulary introduced in the first three courses, with deeper emphasis on global work situations. Adopts different pedagogical approaches such as group practice, role play and situational dialogues to help students acquire basic skills in listening, speaking, reading and writing Modern Standard Chinese. While oral proficiency is the focus of this course, also includes cultural information that accompanies language use in the teaching as well. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 5 | | Prerequisite(s): MND 101; MND 102; MND 201; Credit is allowed for only CHI 202 or MND 202 |
| MSA | 101 | Elementary Arabic I | Introductory Arabic language focuses on pronunciation of Arabic sounds and basic writing skills. Students learn Arabic culture through standard greetings, common phrases, vocabulary and performance of appropriate social behaviors common in the Arab world which prepares students for work in global organizations. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Credit is allowed for only ARB 101 or MSA 101 |
| MSA | 102 | Elementary Arabic II | Continuation of Elementary Arabic I, adopts different pedagogical approaches such as group practice, role play and situational dialogues to help increase listening, speaking, reading and writing skills. While linguistic elements are the focus, cultural and intellectual contexts provide a medium for understanding the Arab-Islamic world and the global business setting. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; Credit is allowed for only ARB 102 or MSA 102 |
| MSA | 201 | Intermediate Arabic I | Directed to students who have completed the first two courses of college-level Arabic. Students reach an advanced level of oral proficiency through concentrating on new verbs, vocabulary and unique structures of sentences which enable them to master a highly sophisticated usage of the language. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; MSA 102; Credit is allowed for only ARB 201 or MSA 201 |
| MSA | 202 | Intermediate Arabic II | Provides advanced ability to understand, read, write and communicate in Arabic and is directed to students who have completed the first two Arabic elementary courses and the first intermediate course. Focuses on transitive, intransitive and passive and active verbs which enable students to express themselves in highly sophisticated Arabic styles and discourse. Students study how Arabic people perceive and communicate important cultural, historical and economic themes as well as major historical figures and their contributions to Arabic society. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Prerequisite(s): MSA 101; MSA 102; MSA 201; Credit is allowed for only ARB 202 or MSA 202 |
| MSE | 100 | Introduction of Materials Engineering | Engineering design process, concepts about materials, and the materials engineering profession, including teaming, computer models, communication, and societal impact. A basic understanding of high school algebra, computing, and physics are necessary to be successful in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 2 | | Pre-requisites: Undergraduate Engineering or University College student |
| MSE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| MSE | 211 | Introduction to Mechanics of Materials | Topics include stress, strain, elasticity, axial loading, torsion, bending, yield criteria, fracture, general energy methods and Castigliano's Theorem. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: PHY 121; PHY 122; MSE 250 with a C or better |

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| MSE | 215 | Materials Synthesis | Introduces contemporary techniques for synthesizing both traditional and novel materials and the corresponding correlation to synthesized materials properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre/Co-requisite: MSE 250 with C or better if completed |
| MSE | 250 | Structure and Properties of Materials | Basic concepts of material structure and its relation to properties. Application to engineering problems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): CHM 114 or 113 with Pre- or corequisite(s): CHM 116 ** DO NOT TOUCH REQUIREMENTS W/OUT SUPERVISOR APPROVAL!** |
| MSE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 301 | Materials and Civilization | Focuses on exploring how materials technology can change people's lives. Traces how societies evolved based on the access to materials and the ability to exploit them and trade them among nations. Studies the role of materials in a variety of contexts such as food, art, warfare, transportation, medicine, information and energy from the Stone Age through the industrial revolution to the modern world. Analyzes the connection between the dramatic developments in civilization and advances in materials through the lens of structure, properties and processing of materials. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Minimum Junior standing; Credit is allowed for only MSE 301 or 394 (Materials and Civilization) |
| MSE | 308 | Sensing the World | Project-oriented science course develops critical thinking and technical skill using Internet modules on the five senses. | N | LEL | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 4 | SQ | Pre-requisite: MSE 208 |
| MSE | 330 | Thermodynamics of Materials | Principles of statistical mechanics, statistical thermodynamics of single crystals, solutions, phase equilibrium, free energy of reactions, free electron theory, and thermodynamics of defects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate or Materials minor student, OR other majors with minimum 3.00 GPA; MSE 250 or ECE 350 |
| MSE | 335 | Materials Kinetics and Processing | Introduces kinetics in processing of materials as illustrated through real-world materials processing examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 330 |
| MSE | 355 | Structure and Defects | Elements of the structure of metals and alloys, measurement of mechanical properties, and optical metallography. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or students with approved Materials minor; MSE 250 with a C or better; Pre- or corequisite(s): MAT 343 OR Fulton Engineering graduate student |
| MSE | 356 | Structures, Properties, and Defects Lab | Lab experiments correlating atomic structure, defects and microstructure of processed metals, ceramics polymers and composites to their mechanical and thermal properties. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 355 |
| MSE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| MSE | 415 | Mathematical and Computer Methods in Materials | Mathematical, computational, and statistical methods and computer programming used to model materials science phenomena and materials engineering applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | CS | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; OR other majors with minimum 3.00 GPA; MAT 274 or 275 with C or better; MSE 250 with C or better; Credit is allowed for only MSE 415 or MSE 598 (Math and Comp Mthds in Matrls) |
| MSE | 420 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, deformation, and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 OR Fulton Engineering graduate student; Credit is allowed for only MSE 420 or MSE 514 |
| MSE | 421 | Physical Metallurgy Laboratory | Focuses on analysis of microstructure of metals and alloys and includes correlation with mechanical properties to some extent. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Pre/Co-requisite: MSE 420 |
| MSE | 440 | Mechanical Properties of Solids | Effects of environmental and microstructural variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355; Credit is allowed for only MSE 440 or MSE 516 |
| MSE | 442 | Fatigue, Fracture, and Creep of Materials | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 442 or MSE 494 (Fatigue, Fracture, Creep) or MSE 540 |
| MSE | 450 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; PHY 131; MSE 355; Credit is allowed for only MSE 450 or MSE 510 |
| MSE | 451 | Introduction to Materials Characterization Lab | Lab for materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LAB | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; Corequisite(s): MSE 450 |
| MSE | 458 | Introduction to Electronic, Magnetic, and Optical Properties | Introduces electrical, optical, and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 415; PHY 241 or 361; Credit is allowed for only MSE 458 or MSE 515 or MSE 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 460 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250; Credit is allowed for only MSE 460 or MSE 494 (Nanomat. In Energy Production) or MSE 560 or MSE 598 (Nanomat. In Energy Production) |

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| MSE | 470 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): FSE undergrad or Materials minor; With C or better: CEE 213, MAE 213, or MSE 211; MAT 242, 342, or 343; MSE 250 or Aerospace major with MAE 325 (394); Credit is allowed for only MAE 455, 513, 598 (Polymers and Composites), MSE 470 or 513 |
| MSE | 471 | Introduction to Ceramics | Principles of structure and property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 355 |
| MSE | 475 | Fundamentals of Microelectronics Packaging | Multidisciplinary foundation course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 475 or MSE 518 or EEE 518 or MAE 518 or CHE 518 |
| MSE | 476 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering undergraduate student or Materials minor; MSE 250 with C or better; Credit is allowed for only MSE 476 or MSE 519 |
| MSE | 482 | Materials Engineering Design | Principles of the design process. Feasibility and optimization. Manufacturing processes, materials selection, failure analysis, and economics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | L | Prerequisite(s): Fulton Engineering undergraduate student: MSE 420 OR Materials minor, Chemistry, Engineering, or Physics major; MSE 355 and 356; minimum 87 hours; Pre- or corequisite(s): MSE 470 and 471 OR Fulton Engineering graduate student |
| MSE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| MSE | 489 | Capstone Design Project I | Covers how to plan an open-ended design project, including experience with technical writing and technical presentations. Both MSE 489 & 490 must be taken to secure L General Studies designation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | L | Co-requisite: MSE 482 |
| MSE | 490 | Capstone Design Project II | Students learn how to conduct an open-ended design project, including experience with technical writing and technical presentations. Both MSE 489 and 490 must be taken to secure L General Studies designation. | N | RSC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 2 | L | Prerequisite(s): MSE 489 |
| MSE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | | Prerequisite(s): Barrett Honors student |
| MSE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MSE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Prerequisite(s): Fulton Engineering undergraduate student |
| MSE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-7 | L | Prerequisite(s): Fulton Engineering undergraduate or graduate student |
| MSE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| MSE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 501 | Linear Algebra in Engineering | Development and solution of systems of linear algebraic equations. Applications from mechanical, structural, and electrical fields of engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite: graduate Engineering major except MS Electrical Engineering, MS Electrical Engineering (AME), MSE Electrical Engineering, PhD Electrical Engineering, or PhD Electrical Engineering (AME). Credit is allowed for only MAE 501 or MSE 501 |
| MSE | 502 | Partial Differential Equations | Development and solution of partial differential equations in engineering. Applications in solid mechanics, vibrations, and heat transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MAE or MSE 502 |
| MSE | 510 | Introduction to Materials Characterization | Introduces materials characterization techniques for analysis of thin films and bulk materials by TEM, SEM, XRD, XPS, and AES. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 450 or 510 |
| MSE | 513 | Polymers and Composites | Relationship among chemistry, structure, and properties of engineering polymers. Design, properties, and behavior of fiber composite systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MAE or MSE 513 |
| MSE | 514 | Physical Metallurgy | Crystal structure and defects. Phase diagrams, metallography, solidification and casting, and deformation and annealing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 420 or 514 |

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| MSE | 515 | Introduction to Electronic, Magnetic, and Optical Properties | Electrical, optical and magnetic properties of solids and microstructure effects as examined through materials-based examples. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Graduate Engineering major; Credit is allowed for only MSE 515 or 598 (Intro to Electronic, Magnetic & Optical Properties) |
| MSE | 516 | Mechanical Properties of Solids | Effects of environmental and microstructural variables of mechanical properties, including plastic deformation, fatigue, creep, brittle fracture, and internal friction. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering or Science & Engr of Materials student; Credit is allowed for only MSE 440 or 516 |
| MSE | 517 | Introduction to Ceramics | Principles of structure, property relations in ceramic materials. Processing techniques. Applications in mechanical, electronic, and superconducting systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 519 | Growth and Processing of Semiconductors | Briefly introduces semiconducting materials and emphasizes the characteristics of defects in semiconductors and their influence on electronic properties. Covers principles of growth of bulk crystals, epitaxial growth, oxidation, diffusion, ion implantation, and metallization. Discusses the introduction of defects during growth and processing of semiconductors and their influence on device behavior. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering student; Credit is allowed for only MSE 476 or 519 |
| MSE | 523 | Structural and Mechanical Properties of Materials | Designed for first-year PhD students in the School of Materials. Topics include crystallography theory, tensor properties of materials, elasticity, crystal defects, dislocation theory, plasticity, fracture, fatigue, and creep. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |
| MSE | 524 | Advanced Thermodynamics | Equilibrium thermodynamics. Chemical reactions, phase equilibria, and stability in multicomponent systems. Aqueous solutions and electrochemistry. Introduces statistical thermodynamics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 541 or MSE 524 |
| MSE | 526 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 526 or NAN 511 or PHY 511 |
| MSE | 527 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; MSE 526; Credit is allowed for only PHY 482 or PHY 512 or NAN 512 or MSE 527 |
| MSE | 540 | Fracture, Fatigue, and Creep | Relationship between microstructure and fracture; fatigue and creep properties of materials. Environmental effects and recent developments. Current theories and experimental results. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student; Credit is allowed for only MSE 442, 494 (Fatigue, Fracture, Creep) or 540 |
| MSE | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only CHM 544 or MSE 544 or NAN 544 or PHY 444 or PHY 544 |
| MSE | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only NAN 546 or MSE 546 or PHY 546 |
| MSE | 548 | Fundamentals of Microelectronics Packaging | Multidisciplinary course in addressing electrical, thermal, materials, chemical, manufacturing, and reliability problems in packaging. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Fulton Engineering student. Credit is allowed for only CHE 518 or EEE 518 or MAE 518 or MSE 475 or MSE 548 |
| MSE | 550 | Advanced Materials Characterization | Analytical instrumentation for characterization of materials; SEM, SIMS, Auger, analytical TEM, and other advanced research techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisite: Graduate Engineering OR Science and Engineering of Materials student |
| MSE | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 552 or NAN 552 or PHY 552 or SEM 552 |
| MSE | 553 | Electron Microscopy Laboratory I | Lab support for MSE 552. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Corequisite(s): MSE 552 or PHY 552; Credit is allowed for only MSE 553 or PHY 553 |
| MSE | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent-beam diffraction, and electron holography. Novel developments and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 554 or PHY 554 |
| MSE | 555 | Electron Microscopy Laboratory II | Lab support for MSE 554. | N | LAB | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| MSE | 561 | Phase Transformations, Kinetics, and Diffusion in Solids | Hetero/homogeneous diffusion-controlled transformations, order-disorder transformations, and shear martensitic athermal transformations in solids. Courses in advanced thermodynamics and structure and properties of materials are strongly recommended in preparation for this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Pre-requisites: Graduate Engineering student |

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| MSE | 565 | Structural Materials in Nuclear Power Systems | Provides an overview of reactor systems and discusses the structural materials used in reactor components (e.g., fuel/core, wall/blanket, heat exchanger, and steam turbine materials). Discusses design considerations and materials degradation processes that occur in service. Emphasizes the effect of radiation damage on materials properties. Reviews reactor systems, including fission-(e.g., PWR, LWR, BWR, LMFBR) and fusion-based reactors. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): graduate Engineering major. Credit is allowed for only MAE 494 (Structural Materials in Nuclear Power Systems) or MSE 494 (Structural Materials in Nuclear Power Systems) or MSE 565 |
| MSE | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 3 | | Prerequisite(s): Fulton Engineering graduate student; Credit is allowed for only MSE 571 or NAN 571 or PHY 571 |
| MSE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisites: Graduate Engineering student |
| MSE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | Pre-requisite: Graduate Engineering student OR Science & Engr of Materials student |
| MSE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials & Science Engineering Masters student |
| MSE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | SEM | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Prerequisite(s): Fulton Engineering graduate student |

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| MSE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | Prerequisite(s): Fulton Engineering graduate student |
| MSE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisite: Materials Science & Engineering PhD student |
| MSI | 601 | Contemporary Topics in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from the arts and other disciplines that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): doctoral Music students |
| MSI | 602 | Current Issues in Music Research | Required for all PhD in Music students. Content includes readings and discussions of topics drawn from current public policies, events, and popular culture that impact and interact with music, music practices, and music research. Requires literature review or research paper. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): doctoral Music students |
| MSI | 755 | Historical Research in Music | Required for all PhD in Music students. Knowledge and insights related to conducting historical research in music. Includes development of a mini-proposal for a dissertation on the history of music education, or draft of a historical research paper suitable for presentation or publication. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): doctoral Music students |
| MTC | 123 | Beginning Composition | Intended for freshmen and sophomores in the composition concentration. Introduces composing. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Theory and Composition student |
| MTC | 125 | Basic Music Theory | Notation, scales, keys, modes, intervals, chords, basic part writing and composition. Development of related aural skills through sight-singing and dictation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 221 | Music Theory: 18th Century | Styles, techniques, and idioms of 18th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 125 with C or better |
| MTC | 222 | Music Theory: 19th Century | Styles, techniques, and idioms of 19th-century music; emphasis on analysis, composition (part writing), and related aural skills, with applications for performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 223 | Music Theory: 20th Century | Styles, techniques, and idioms of 20th-century music; emphasizes innovative treatments of musical elements, analysis, and composition; related aural skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |
| MTC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 315 | Modern Arranging I | Analysis of scores and recordings, application of orchestration and four and five-part harmonization techniques frequently used in arranging for the contemporary jazz ensembles and studio orchestra | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUP 236 with C or better |
| MTC | 316 | Modern Arranging II | A continuation of MTC 315, analysis of scores and recordings, application and creation of new arrangements for contemporary jazz ensembles and/or studio orchestra. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite: Bachelor of Music student; MTC 315 with C or better |
| MTC | 320 | Modal Counterpoint | Counterpoint based on 16th-century vocal polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 321 | Tonal Counterpoint | Counterpoint based on 18th-century polyphonic style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 221 with C or better |
| MTC | 323 | Composition | Writing music compositions, with emphasis on basic techniques and smaller structures. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Prerequisite(s): MTC 123 with C or better OR BMUS Theory and Composition (Composition) or BMUS Theory and Composition (Theory) major with minimum 55 hours |
| MTC | 327 | Intermediate form and Analysis | Organizing elements in the most important contrapuntal and homophonic musical forms from the Renaissance through the 19th century. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 222 with C or better |
| MTC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 422 | Musical Acoustics | Properties of sound and tone. Harmonic series, instruments, the ear, auditorium acoustics, and the reproduction of sound. Assumes a thorough knowledge of musical notation, intervals, scales, and harmony, or 2 years of music theory. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; Passed audition |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MTC | 425 | Studies in 20th-Century Theory | Continued development of analytical techniques and aural skill, with an examination of the theoretical systems applicable to 20th-century music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 428 | Advanced form and Analysis | Organizing principles of the large forms of musical composition in the 19th and 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 429 | Canon and Fugue | Writing of canons and fugues in tonal style. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 321 with C or better |
| MTC | 430 | 20th-Century Counterpoint | Counterpoint studies utilizing 20th-century idioms. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MTC 223 with C or better |
| MTC | 433 | Orchestration | Studies scoring music for full and chamber orchestras; examines individual orchestral instruments (characteristics and performance techniques). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music student |
| MTC | 436 | Electronic Studio Techniques I | The study of computer music systems emphasizing advanced audio synthesis and resynthesis as well as their application to professional compositional environments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MTC 223 |
| MTC | 437 | Electronic Studio Techniques II | Principles of digital electronic music systems and their applications in the composition of electronic music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 440 | Jazz Theory and Ear Training | Advanced study of jazz harmonic systems. Daily oral drills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MTC | 441 | Jazz Composition | Creative writing in the smaller forms and in the idiom of jazz. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Music student; MTC 440; MUP 236 with C or better |
| MTC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MTC | 495 | Final Project | Half recital of compositions or approval of a large-scale composition or a research paper. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 0 | | |
| MTC | 496 | Theory Project | Supervised individual writing project dealing with music theory. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MTC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | |
| MTC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MTC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 516 | Baroque Music | Detailed analysis of selected examples of music from the Baroque period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 517 | Classic Music | Detailed analysis of selected examples of music from the Classic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 518 | Romantic Music | Detailed analysis of selected examples of music from the Romantic period. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 519 | Late 19th-Early 20th Century Music | Detailed analysis of selected examples of music from the late 19th and early 20th centuries. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 520 | Analytical Techniques | Analytical techniques systematically applied to music. Concentration on structural and compositional procedures. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 523 | Advanced Composition | Advanced music composition, including complex techniques and larger structure. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-3 | | Pre-requisite: Graduate Music student |
| MTC | 525 | Pedagogy of Theory | Practices and principles of teaching music theory. Emphasizes most desirable and practical offerings possible. Comparative studies of existing practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 528 | History of Music Theory | Theory from the 17th century to the present. Need not be taken in sequence with MTC 527. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 540 | Jazz Theory and Ear Training | Surveys some of the most influential trends in the jazz tradition with in-depth analysis of harmonic systems, linear elements, and compositional strategies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Graduate Music student |
| MTC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MTC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Pre-requisite: Graduate Music student |
| MTC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre-requisite: Graduate Music student |
| MTC | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 723 | Advanced Composition | Special problems in writing in complex forms and textures. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): doctoral Music student |
| MTC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MTC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MTC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |

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| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 180 | Mathematics for Elementary Teachers I | Numbers, number systems, operations on numbers; patterns, algebraic reasoning, and functions; problem solving. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 117, MAT 142 or MAT 170 with C or better |
| MTE | 181 | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | 181 | Mathematics for Elementary Teachers II | Data analysis, probability, and discrete mathematics; geometry and measurement; structure and logic. For prospective elementary education and special education teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MTE 180 with C or better |
| MTE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Pre-requisite: Freshman standing; Maximum 25 earned hours |
| MTE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MTE | 210 | Mentored Tutoring Internship | Introduces math education students to issues of balancing the content of precalculus mathematics with the needs of someone learning it. Addresses core issues, including articulating what is involved in learning the mathematical idea(s); interpreting students' questions; analyzing student thinking and inferring their underlying rationale from a learner-centered perspective; techniques of question-posing, problem-posing, and instructional scaffolding. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Co-requisite: MAT 207 |
| MTE | 250 | Technology and Mathematical Visualization | Uses several software packages for exploring mathematics and for preparing mathematical materials, starting from introductory skills and leading to advanced techniques. Places particular emphasis on using computer software with the aim of visualizing mathematical relationships, structures, and processes. | N | LEL | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207, 270, and MTE 210 with C or better |
| MTE | 280 | Investigating Quantity: Number, Operations & Numeration Systems | Investigation of mathematical principles and processes regarding the real number system and its properties develop number sense and qualitative reasoning abilities. Designed to meet the requirements for preservice elementary school teachers. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course with C or better |
| MTE | 281 | Investigating Space: Geometry, Measurement, and Visualization | Explores three aspects of geometry: spatial visualization, measurement, and proof. Uses visualization, spatial reasoning, and geometric modeling to solve problems. Provides opportunities for participants (1) to use physical models, technology, and pattern-finding strategies to identify properties of and develop formulas for measuring two- and three-dimensional shapes; and (2) to develop powerful ways of thinking to justify geometric relationships | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): General Studies MA course with C or better |
| MTE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 301 | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking; multiple conceptions of quantity, variables, constants, and unknowns; inductive, deductive, and analogical reasoning; rate of change and proportional thinking; algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | College of Letters & Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: Admission to the Professional Program |

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| MTE | 301 | Investigating Change: Patterns, Functions, and Modeling | Examines different conceptions of algebra as the study of (1) generalized arithmetic, (2) reasoning with symbols, (3) reasoning with patterns and functions, (4) structure in the number system, and (5) modeling. Distinguishes arithmetic from algebraic reasoning, and develops an appreciation for the pervasiveness of the function concept in the K-8 school mathematics curriculum. Features algebraic thinking and representation using algebra tiles and other concrete models, realistic problems, dynamic geometry software, graphing calculators, and a variety of virtual tools and Web sites. Topics include, but are not limited to: patterns, relations, functions and covariational thinking; multiple conceptions of quantity, variables, constants, and unknowns; inductive, deductive, and analogical reasoning; rate of change and proportional thinking; algebra learning trajectories; and comparisons of additive vs. multiplicative, absolute vs. relational, and arithmetic vs. algebraic thinking. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the Professional Program |
| MTE | 320 | Conceptual Foundations of 7-12 Mathematics Curricula and Assessment | Focuses on concepts of mathematics curricula and their relationships to perspectives on learning, instruction, and assessment. Using a variety of participation formats (e.g., individual and small group work, and whole group discussions) and directed activities, participants examine curricular principles underlying the historical development of mathematics curricula and assessment, and current curricula and curricular recommendations and controversies surrounding them. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MAT 207; MTE 210 and 250 with C or better |
| MTE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 402 | Service Learning | K-12 tutoring and mentoring internship related to academic course work in mathematics education. Requires weekly reflective reading and writing. May be repeated for credit. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | C | Pre/Co-requisite: MAT 117 or MAT 142 or other course meeting General Studies MA requirement |
| MTE | 412 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| MTE | 430 | The Development of Mathematical Thinking | This capstone course requires students' sustained engagement with, and analysis of, artifacts from research on learning mathematics from instruction. The artifacts include: curricular/instructional task sequences, samples of student work, video-cases showcasing students' involvement in instruction, problem-solving interviews, and teaching experiments. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisite: MTE 320 with C or better |
| MTE | 482 | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | 482 | Methods of Teaching Mathematics in Secondary School | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: MAT 310 with C or better; Teacher Education milestone |
| MTE | 483 | Mathematics in the Secondary School | Topics in geometry, number theory, algebra, and analysis. Emphasizes unifying principles. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Pre-requisites: MAT 310 with C or better |
| MTE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 485 | Teaching Standards-Based Middle and High School Mathematics | Detailed exploration of the Common Core State Standards (CCSS) for middle school and high school mathematics. In addition to an in-depth coverage of the CCSS content and practices, students engage with, review and analyze existing instructional task sequences addressing the CCSS. Students also design and construct partial and complete lesson plans to cover specific mathematical content and practices. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): MAT 271 or minimum 45 hours; Credit is allowed for only MTE 485 or MTE 494 Adv Mthds Tchng Math Sec Schl |
| MTE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| MTE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MTE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| MTE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| MTE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |

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| MTE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| MTE | 585 | Modern Geometry for Teachers | Euclidean, projective, and non-Euclidean geometries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| MTE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| MTE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| MTE | 605 | Research-based Practices, Pedagogy and Instructional Leadership in Mathematics | Examines research-based practices, pedagogy, and instructional leadership in mathematics classrooms K-8. Emphasizes learning and teaching mathematics for understanding. Featured practices and pedagogy for fostering symbolic thinking include inductive and deductive concept development, problem-based learning, cognitively guided instruction, learning trajectories, and use of physical manipulatives and virtual tools to facilitate mathematical thinking. Mathematics instructional leadership projects emphasize development of mentoring techniques and professional development expertise. Prepares K-6 and 5-9 mathematics teachers as mathematics teacher leaders, specialists, or coaches in middle schools and the elementary grades. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 610 | Number and Operations 2 | Examines different conceptions of number and operations as the study of (1) patterns and relationships of numbers, (2) the meaning of operations, (3) reasoning through estimations and conjectures, (4) structure in the number system, and (5) modeling. Participants develop a deeper sense of numbers and operations as they progress through the K-8 curriculum. Various manipulatives and electronic tools facilitate investigations. Topics include: base systems, composing and decomposing numbers, operational relationships, operational strategies, integer meaning, and rational numbers. | N | LEC | N | GNA | MaryLouFulton Teachers College | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MTE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |

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| MTE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MTE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| MTE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| MUD | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUD | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| MUD | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| MUD | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| MUE | 101 | The ASU School of Music Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges and opportunities of their university, the School of Music and the Herberger Institute for Design and the Arts. Covers the music education and music therapy programs in the School of Music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUE 101 or 194 (ASU School of Music Experience for Music Education) |

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| MUE | 110 | Introduction to Music Education | Overview of music education and career options. Orientation to student characteristics, teacher roles, teaching qualities, and philosophical and historical foundations. Requires school observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major |
| MUE | 154 | Gesture and Sound | Covers fundamentals of musical leadership through gestures associated with sounds in the performance of music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 161 | Introduction to Music Therapy | Overview of the profession of music therapy and its applications in mental health, rehabilitation, and special education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 162 | Introduction to Music Therapy Lab | Develops skills needed to lead music experiences in a variety of settings. | N | LAB | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music education or therapy major; Corequisite(s): MUE 161 |
| MUE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 211 | Music in Recreation | Materials, methods, and organizational structures appropriate for recreational music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 261 | Music Therapy as a Behavioral Science | Orientation to preclinical experience with emphasis on observation skills, assessment, goal setting, and professional ethics. Requires off-campus observations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music student; MUE161 with C or better |
| MUE | 262 | Music Therapy as a Behavioral Science Lab | Develops skills needed to lead music experiences in a variety of settings. | N | LAB | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Corequisite(s): MUE 261 |
| MUE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 310 | Music in Early Childhood | Examines music through the lens of the culture(s) of young children, which (though they intersect with adult cultures) are unique, different from adult experiences, and particular to them. Emphasizes the musical content of children's songs as well as the music they hear, and the kinds of musical engagements that are particular to young children. Also emphasizes the uses, functions, and meanings of music for children. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: ENG 102 with C or better; minimum 30 hours |
| MUE | 311 | Music in the Lives of Children and Youth | Examines the role of music in the lives of young people with particular attention to child and youth learning and development (cognitive, social, emotional, personal/identity, musical). Includes examination and critique of music intended for children and youth (e.g., social and gendered meanings), as well as consideration of how music is related to individual and social identity. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Pre-requisites: BLE 220, RDG 291, SPE 222 or TEL 215, or minimum 30 hours |
| MUE | 317 | Strings Lab | Students apply educational theory to the development and refinement of specialized skills in string teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 319 | Digital and Hybrid Lab | Provides a foundation for integrating a range of technologies and digital media in music teaching and learning. Encourages critical and creative thinking while considering the possibilities for innovative applications of technology and digital media based upon contemporary curricular, theoretical and pedagogical frameworks. Students demonstrate skills and understanding related to using technology and digital media in the context of musicianship, music teaching and learning. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUE | 321 | Jazz Lab | Jazz rehearsal and performance techniques and repertoire appropriate for rehearsing jazz ensembles in K-12 schools. | N | LEC | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music Education major; Credit is allowed for only MUE 321 or MUE 394 (Jazz Lab) |
| MUE | 323 | Keyboard Lab | Piano keyboard skills appropriate for music educators. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only MUE 323 or MUE 394 (Keyboard Lab) |
| MUE | 327 | Brass Lab | Students apply educational theory to the development and refinement of specialized skills in brass teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 334 | Guitar Lab | Guitar skills for teaching guitar classes in K-12 schools. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music Education major; Credit is allowed for only MUE 334 or MUE 394 (Guitar Lab) |
| MUE | 335 | Educational Methods for Guitar | Students apply educational theory to the development and refinement of specialized skills in guitar teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education or therapy interview |
| MUE | 336 | Percussion Lab | Students apply educational theory to the development and refinement of specialized skills in percussion teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 337 | Woodwinds Lab | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 338 | Educational Methods for Double Reed Instruments | Students apply educational theory to the development and refinement of specialized skills in woodwind teaching. 3 hours per week. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music major; Passed music education interview |
| MUE | 381 | Music Therapy Research | Statistics and research design appropriate for investigations in music therapy. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | L | Pre-requisite: Music Therapy student |
| MUE | 384 | Therapy Preclinical I | Paired students provide music therapy for small groups at a community agency for mentally retarded, geriatric, or physically disabled clients for a minimum of 10 clock hours. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |

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| MUE | 385 | Therapy Preclinical II | Individual placement in ASU Music Therapy Clinic. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 386 | Therapy Preclinical III | See MUE 385. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 387 | Therapy Preclinical IV | Individual clinical work in a community mental health facility. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 388 | Therapy Preclinical V | See MUE 387. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisites: Music Education or Music Therapy student |
| MUE | 413 | The Art of Teaching Children Music | Methods of instruction, planning, and presentation of appropriate contents in music. For music educators and music therapists. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music student |
| MUE | 415 | The Art of Teaching Contemporary Musicians | Curriculum, student characteristics, and teaching strategies for general music. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major |
| MUE | 436 | Percussion Methods for Music Therapy | Provides knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy student |
| MUE | 441 | Psychology of Music | Psychological and physiological aspects of music emphasizing musical behavior, function, perception, and learning. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 463 | Music Therapy Techniques | Organization, administration, and use of music in rehabilitation with various client populations. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 467 with C or better |
| MUE | 465 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; Minimum Junior standing |
| MUE | 467 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy student; MUE 261 with C or better; MUE 211 with C or better |
| MUE | 475 | Group Process and Music Therapy | Principles of group process, verbal counseling, professional writing, as related to music therapy practice. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Pre-requisite: Music Therapy student; MUE 463 (MUE 362) with C or better or Graduate student in Clinical Music Therapy |
| MUE | 476 | Internship in Music Therapy | Full-time, 6-month, off-campus residency in an approved clinical institution. | N | PRA | N | Z1 | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music Therapy student; MUE 211 with C or better |
| MUE | 480 | The Art of Teaching Choral Musicians | Methods of instruction, organization, and presentation of appropriate content in choral music classes. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 481 | The Art of Teaching Beginning Instrumentalists | Instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 482 | The Art of Teaching Advanced Instrumentalists | Advanced instrumental music as a means of developing music skills, understandings, and attitudes in elementary and secondary school students. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Pre-requisite: Music major with passed audition; minimum 55 hours |
| MUE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 489 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy student; MUE 211 with C or better |
| MUE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUE | 501 | Introduction to Professional Music Therapy | Introduces the profession of music therapy through lecture, active discussion, and observations of clinical sessions. Experiential learning is achieved through music making in peer groups. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy graduate student or Clinical Music Therapy graduate student |
| MUE | 536 | Percussion Methods for Music Therapy | Designed to provide knowledge and practical performance skills on percussion instruments, further improving the effectiveness of the student in the practice of music therapy. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM Student |
| MUE | 548 | Introduction to Research in Music Education | Survey of research methods and literature in music education. Focuses on interpretation and evaluation. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |

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| MUE | 549 | Foundations of Music Education | A treatment of historical perspectives, philosophy-aesthetics identified with music education, and learning theories applied to music teaching/learning. Basic research and writing skills appropriate to graduate studies in music education. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 550 | Studies in Music Curricula | Scope and sequence of musical experiences. Develops criteria for the evaluation of music curricula. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 551 | Listening and Creating | Studies the nature of music listening and music creating and their relationship. Reviews research and pedagogical practices. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MUE | 552 | Advanced Studies in Secondary General Music | Organization and content of school music classes that are not performance oriented. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 555 | String Pedagogy and Rehearsal Techniques | String pedagogy and orchestral rehearsal skills for teachers who work with K-12 string classes. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only MUE 555 or MUE 598 (String Pedagogy and Rehearsal Techniques) |
| MUE | 560 | Jazz Pedagogy | Study of pedagogy, repertoire, and technique of instruction in jazz styles, ensemble techniques, and performance practice for school ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 562 | Jazz Rehearsal Techniques | Conducting and rehearsal techniques for school jazz ensembles. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 563 | Music Therapy Techniques for Children | Organization, administration, and use of music in rehabilitation with children and adolescents with special needs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM student; MUE 581 with C or better |
| MUE | 564 | Instrumental Music, Advanced Rehearsal Techniques | In-depth analysis of instrumental techniques in preparation for a thorough discussion of band tuning problems and solutions. Discussion of productive conducting and rehearsal techniques for school music teachers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 565 | Children's Music for Music Therapy | Methods of music therapy instruction, planning, and presentation of appropriate contents in music for children ages 2-12. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: Music Therapy Graduate student |
| MUE | 566 | Instrumental Literature and Pedagogy for Schools | Provides an in-depth examination of ensemble music and teaching techniques to instrumental music teachers. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 567 | Professional Practicum I | Students provide music therapy for small groups at a community agency providing services to people who are intellectually disabled, physically disabled, and the hearing impaired. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Therapy Graduate student or Clinical Music Therapy Graduate student |
| MUE | 568 | Choral Music, Advanced Rehearsal Techniques | Musical and vocal techniques necessary for presentation of choral literature. Analysis and experimentation with psychological, acoustical, and other problems of rehearsal and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 569 | Professional Practicum II | Continuation of MUE 567. Practicum. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music Education Graduate student; MUE 567 with C or better |
| MUE | 570 | Choral Literature for Schools | Comprehensive study and analysis of choral music for the high school with special emphasis on octavo literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 571 | Music Therapy Seminar I: Supervision and Administration | Covers health care administrative skills pertinent to music therapy practice, including budgeting, resource allocation, and staff supervision. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUE | 572 | Music Therapy Seminar II with Lab: Advanced Practice in Music | Deepens and broadens knowledge and skills in music therapy clinical practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 573 | Music Therapy Seminar III with Lab: Music Therapy Theory and Philosophy | Explores current theory in music therapy and develops the theoretical basis for the profession. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM student |
| MUE | 574 | Music Therapy Music Skills I: Improvisation | Teaches new forms of musical improvisation pertinent to music therapy practice, broadening and deepening existing skills. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM student |
| MUE | 575 | Music Therapy Music Skills II: Accompaniment | Teaches new forms of musical accompaniment pertinent to music therapy practice, broadening and deepening existing skills. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music Therapy MM student |
| MUE | 579 | Psychology of Music | Nature of musicality and its evaluation. Review of recent research. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 581 | Music Therapy Theory and Practice in Psychopathology | Influence of music on behavior; principles and practices of music therapy and psychiatric clients. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy Graduate student or Clinical Music Therapy Graduate student |
| MUE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 585 | Vocal Acoustics and Production | In-depth approach to the psychological/physiological workings of the vocal mechanism. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUE | 586 | Music Therapy Graduate Clinical Project | Develops clinical- and research-based music therapy skills in selected cognate area. | N | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-6 | | Pre-requisites: MUE 571, 572, 574, and 575 |
| MUE | 589 | Repertoire for Music Therapy | Music skills repertoire for music therapy, including units on brass, strings, woodwinds, electronic instruments, computer music, and improvisation techniques. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Music Therapy MM Student |

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| MUE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 754 | Teacher Education Research and Policy | Reading and discussion of research and policy documents in teacher education with a focus on arts and music teacher preparation. Includes development of a research project or essay suitable for publication or presentation, an abbreviated prospectus for a dissertation, or literature review. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 756 | Qualitative Research in Music Teaching and Learning | Studies qualitative research and methods in music education, including readings and discussion, data collection and data analysis. Includes development of an abbreviated prospectus for a qualitative dissertation, or a draft of a qualitative research paper suitable for presentation or publication. Prerequisite: doctoral student in music education. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 757 | Quantitative Research in Music Teaching and Learning | Studies quantitative research and methods in music education, including readings and discussion, data collection, and analysis. Includes development of an abbreviated prospectus for a quantitative dissertation or a draft of a quantitative research paper suitable for presentation or publication. | N | LEC | N | Z1 | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Doctoral Student in Music Education |
| MUE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |

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| MUE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUP | 100 | Concert Attendance | 6 semesters required for all music majors. A total of 4 convocations and 6 approved recitals required each semester. | N | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 0 | | |
| MUP | 101 | The ASU School of Music Experience | Orientation to university and School of Music resources and procedures as well as career planning and guidance. Through various course discussions and assignments, music students examine the concept of academic integrity and its potential impact on their future and learn about taking an interdisciplinary perspective. Required for all music majors. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Credit is allowed for only MUP 101 or 194 (ASU School of Music Experience) |
| MUP | 111 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 117 | Applied Jazz Improvisation | Principles, methods, and theory of jazz performance and pedagogy. May be repeated for credit. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 121 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 127 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 4 | | Prerequisite(s): Music major who has passed audition |
| MUP | 131 | Class Piano | 4-semester sequence (with MUP 132, 231, and 232) designed for those with little or no piano experience. Emphasizes keyboard technique, sight reading, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 132 | Class Piano | 4-semester sequence designed for those with little or no piano experience. Emphasizes keyboard technique, simple accompaniments, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 131 with C or better |
| MUP | 133 | Class Voice | 4-semester sequence (with MUP 134, 233, and 234) open to all students. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 134 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 170 | Music Theatre I | Development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | |
| MUP | 172 | Music Theatre II | Further development of performance skills for opera and music theater, broadening the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to research and develop characters in order to perform various types of songs and dramatic scenes. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: MUP 170 |
| MUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | Prerequisite(s): Music major who has passed audition |
| MUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisite(s): Music major who has passed audition |
| MUP | 209 | Beginning Choral Conducting | Essentials of choral conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 210 | Beginning Instrumental Conducting | Essentials of instrumental conducting techniques. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 217 | Applied Jazz Improvisation | Emphasizes basic jazz literature, chord symbol reading, melodic patterns and concepts, ear training, analysis of improvised solos, and pedagogical issues. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 117 with C or better |

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| MUP | 231 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP132 with C or better |
| MUP | 232 | Class Piano | See MUP 131. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP231 with C or better |
| MUP | 233 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 234 | Class Voice | See MUP 133. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 235 | Jazz Piano | 2-semester sequence (with MUP 236) designed for jazz keyboard experience. Emphasizes chord symbol reading, simple improvisation, and voicing. 2 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student |
| MUP | 236 | Jazz Piano | See MUP 235. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 250 | Diction for Singers | Use of phonetics in the study of song and opera literature. Language emphasis differs each semester. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 270 | Music Theatre III | Further development of performance skills for music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students learn to develop characters and project various moods and scenarios through song. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 172 |
| MUP | 272 | Music Theatre IV | Further development of performance skills for opera and music theater emphasizing the portrayals of simple and complex emotions, character development, solo and ensemble performance, music and dialogue analysis, body awareness, and freedom of the vocal and breath mechanisms. Students conduct in-depth analyses of characters from both the historical and contemporary repertoire of music theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 270 |
| MUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | Prerequisite(s): Music major who has passed audition |
| MUP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 301 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 232. Emphasizes accompaniments, ensemble playing, score reading, advanced harmonizations, repertoire, technique, and improvisation. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: Music student; MUP 232 with C or better |
| MUP | 302 | Advanced Class Piano | Required for the choral-general concentration of the Music Education major. Open to other music majors who have completed MUP 301. A sequential continuation of MUP 301 skills that include both group and studio instruction. 2 hours per week. May not be taken for audit. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisite: Music student; MUP301 with C or better |
| MUP | 311 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 317 | Applied Jazz Improvisation | Emphasizes listening, analysis, and performance of advanced jazz literature and composition in contemporary styles. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 319 | Advanced Audio Engineering in the Arts | Synthesis and application of analog and digital recording methods (voices and instruments), mixing and the advanced skills needed to create professional recordings (CDs, DVDs, internet sound files, etc.). Further emphasis on electronic music production, computer based applications, MIDI, and contemporary studio hardware. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Minimum Junior standing in the Herberger Institute for Design in the Arts |
| MUP | 321 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 327 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Music major who has passed audition |
| MUP | 337 | Studio Instruction: Collaborative Piano | Repertoire to be selected from vocal and instrumental literature. 1 hour lesson per week. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 339 | Choral Conducting | Elements of choral conducting technique and interpretation. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 209 or MUP 210 |
| MUP | 340 | Instrumental Conducting | Fundamentals of score reading and interpretation of instrumental music. 3 hours per week. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: MUP 210 with C or better |

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| MUP | 370 | Music Theatre V | Development of specific skills for musical-dramatic interpretation and of specific physical theatre skills for the actor. Performance-based class provides an opportunity to connect physically, emotionally and intellectually to the body of the musical theatre actor, and provides an opportunity to explore strong, clear acting choices. Students participate in various movement theories and techniques in class and complete independent performance projects utilizing the body and the body with voice, choosing a song from various categories to workshop and perform. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): MUP 272 |
| MUP | 373 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles); Section 2 (Chorus). May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 374 | Music Theatre: Production | In-depth study of approaches to Technical Music Theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) is followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 385 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 388 | Collaborative Piano | Performance class for collaborative piano majors. Repertoire includes vocal and instrumental selections. Advanced analysis of ensemble techniques, style and performance practice in preparation for graduate study or professional application. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: 4 terms of MUP 127 with C or better |
| MUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 440 | Keyboard Harmony | Performance-oriented class emphasizing chord progressions, harmonization, figured bass realization, stylistic improvisation, transposition, open score reading, and sight reading. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 442 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. Curriculum accommodates the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |
| MUP | 443 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): Music major or nonmajor who has passed audition |
| MUP | 448 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 448 or 494 (Classical Style: Performance and Analysis) |
| MUP | 449 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music major who has passed audition; Junior standing; Credit is allowed for only MUP 449 or 494 (Unaccompanied Bach: Performance & Analysis) |
| MUP | 450 | Choral Union | Large mixed ensemble focuses on the study, synthesis, and performance of major choral masterworks while gaining in-depth understanding of significant choral repertoire and historical ramifications. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 451 | Repertoire | In-depth study of music for performing, involving advanced interpretive and technical concepts from historical, stylistic, and performance-related perspectives. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Completed 4 semesters of 100-level studio instruction |
| MUP | 453 | Song Literature | Early Italian, English, German, and French art song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |

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| MUP | 454 | Song Literature | American, Russian, Spanish, Scandinavian, and contemporary song. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 455 | Men's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of a variety of historically and musically standard male repertoire, within historical context. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 457 | Women's Chorus | Membership in this ensemble involves the in-depth study and application of specialized musical skills in the performance of historically and musically important repertoire for treble voices. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 459 | Barrett Choir | The Barrett Choir is an opportunity for students from all over the university, but primarily from Barrett, The Honors College, to participate in a high-quality choral ensemble. The group seeks to harness the creativity and intellect of honors students to create a collaborative ensemble that operates on a unique model of student-centered learning. The repertoire, mostly chosen by the members, is highly varied, ranging from world music to pieces in the great choral tradition to newer music and popular music. There are normally two major concerts per semester, with some occasional smaller performances. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): minimum 45 hours |
| MUP | 460 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music major (bass, cello, viola, violin) who has passed audition |
| MUP | 461 | Marching and Concert Bands | Development of specific professional performing skills through staging of formations and drills for football games and other events (Marching Band); the development of specific professional performing skills for concert settings, with in-depth study of masterpieces of symphonic band literature (Concert Band). An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 465 | Music Theatre VI: Advanced Acting | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: MUP 370; Credit is allowed for only MUP 465 or 494 (Acting for Singers) |
| MUP | 470 | Music Theatre VII: Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: MUP 465; Credit is allowed for only MUP 470, 494 (Musical Theatre Dance) or 566 |
| MUP | 471 | Music Theatre: Workshops | Development of specific skills for musical-dramatic interpretation. Section 1 (Aria Preparation); Section 2 (Broadway I); Section 3 (Broadway II). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite: Music major |
| MUP | 472 | Music Theatre VIII | Development of specific skills and effective practices for musical theatre auditioning and development of specific skills for musical-dramatic interpretation. This is a performance-based class providing an opportunity to explore strong, clear acting choices for the musical theatre performer in a setting with a scene partner or scene partners, requiring the performance of songs, monologues, scenes, and choreography. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Music | 1 | | Pre-requisites: MUP 470 |
| MUP | 476 | New Music Ensemble | In-depth study, synthesis, and performance of classical works written within the last twenty years for small ensemble and for instruments with electronics. Involves discussion and realization of advanced interpretive and technical concepts related to contemporary music. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 479 | Chamber Music Ensembles | Faculty-coached ensembles involving in-depth study and application of specialized, professional skills in performing with two or more players of like or unlike instruments and/or voice. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |
| MUP | 481 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisites: Music students who have passed audition |
| MUP | 482 | Piano Pedagogy | Continuation of MUP 481 (Piano). Problems and techniques of teaching intermediate to advanced piano students. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Music major who has passed audition |
| MUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Prerequisite(s): Music major who has passed audition |
| MUP | 486 | Jazz Band | Analysis, rehearsal and performance of new, traditional, and Latin literature for jazz ensembles. Development of advanced sight-reading and instrumental doubling skills. 4 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 487 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. May not be taken for audit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Prerequisite(s): Music major who has passed audition |

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| MUP | 489 | Ethnomusicology Ensembles | Students apply indigenous music theories to actual practice, contextualized in background reading and listening, as they refine their ability to perform orally generated music and sometimes dance traditions. This course is open to non-music majors by audition or consent of instructor. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 495 | Performance | For candidates of a BM degree in which 1/2 recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Prerequisite(s): Music major who has passed audition |
| MUP | 496 | Performance | For candidates of a BM degree in which a full recital is a requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 0 | | Prerequisite(s): Music major who has passed audition |
| MUP | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Pre-requisites: Barrett Honors Music students who have passed audition |
| MUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | L | Prerequisite(s): Music major who has passed audition |
| MUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | STO | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | Prerequisite(s): Music major who has passed audition |
| MUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUP | 507 | Group Piano Practicum | Curricula, materials, and teaching techniques for group teaching at the university and community college levels. Observation/supervised teaching in group piano. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 508 | Studio Observation | Weekly observation of studio teaching by various piano faculty. Paper as final requirement. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 509 | Jazz Keyboard Harmony | Emphasizes jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 510 | Jazz Keyboard Harmony | Continuation of emphasis on jazz chords and chord progressions, harmonization, voicing, and analysis of transcriptions. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 511 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour plus studio class weekly. May not be taken for audit. | Y | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 2 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 517 | Advanced Improvisation | Improvisation techniques within the context of advanced jazz literature. Must be taken in sequence with MUP 518. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 521 | Studio Instruction | Secondary or minor instrument instruction. Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1/2 hour per week. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 527 | Studio Instruction | Bassoon, cello, clarinet, contrabass, cornet, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, voice. Minimum contact of 1 hour per week. May be repeated for credit. May not be taken for audit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Graduate Music major who has passed an audition |
| MUP | 540 | Principles of Integrated Conducting | Score preparation and conducting techniques for instrumental music. Concentration on study of historical styles. Required of DMA students in Instrumental Music. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: DMA Conducting major |
| MUP | 541 | The Art Song | Seminar on solo song from its beginning to the present day. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

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| MUP | 542 | Instrumental Ensembles | Students participate in numerous ensembles and artistic and educational projects that together, comprise a rich assortment of musical experiences. Graduate students especially need opportunities to hone their skills in a great variety of performance opportunities. During the academic year, each student participates in a variety of projects that present a wide range of musical experiences. The curriculum is designed to accommodate the distinctive needs of each student in that artistic-educational experiences are, to a large extent, tailor made to each individual's career aspirations. Consequently, learning outcomes are highly individualized and student driven, rather than institutionally convenient. Each artistic-educational project focuses on specific pedagogical and/or musical learning outcomes that, in various ways, promote the primary course objective: the enhancement of musical diversity and artistic depth in every student. Audition required during the first week of classes. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Music students who have passed audition |
| MUP | 543 | Choral Ensembles | Active, thoughtful participation in music ensembles can provide for development beyond the possibilities of individual study alone. The ensemble setting is, in part, a forum for the synthesis of component parts of a complete music education. Includes the study and performance of diverse musical expressions that represent a variety of historical and cultural perspectives. These ensembles provide the opportunity to prepare and present varied music composed for the mixed choir from the major stylistic periods with the intent of serving composers, performers and listeners by performing choral music of the highest possible quality. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| MUP | 548 | Classical Style: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining classical period repertoire. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 548 or 598 (Classical Style: Perf. & Anlys) |
| MUP | 549 | The Unaccompanied Music of JS Bach: Performance and Analysis | Integrates historical and theoretical analysis with performance, examining the unaccompanied works of J.S. Bach. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre-requisite: Graduate Music major who has passed audition; Credit is allowed for only MUP 549 or 598 (Unaccomp Bach Perf & Analysis) |
| MUP | 550 | Choral Union | Open to all students in the university and to interested singers in the community by audition. Preparation and performance of the larger choral works. 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 450 or 550 |
| MUP | 551 | Repertoire | Literature available for performance in all performing media. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 554 | Major Repertoire, Score Study, and Performance Practice | Conducting course comprising a survey of significant repertoire (encompassing, over multiple semesters, literature from choral, musical theater/opera, orchestral, and wind band genres); an introduction to historical performance practice; and a range of score study techniques. Conducting majors are required to enroll each semester (or as advised) and, subsequently: display a comprehensive historical knowledge of the repertoire and development of ensembles over the past 500 years, demonstrate command of standard performance practices with respect to each historical era, and exhibit a clear understanding of varied methods of score study. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisite: DMA Conducting major |
| MUP | 555 | Men's Chorus | Rehearsal and performance of music for mixed voices. 3 hours per week. An audition is required to participate in the ensemble. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | Credit is allowed for only MUP 455 or 555 |
| MUP | 557 | Women's Chorus | 2 hours per week. An audition is required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-2 | | |
| MUP | 560 | The Visiting Quartet Residency Program | Develops skills as a chamber musician and provides opportunities to work with members of the visiting string quartet in residence. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 1-2 | | Pre-requisite: Graduate Music major who has passed audition |
| MUP | 561 | Marching and Concert Bands | Staging of formations and drills for football games and other events (fall); masterpieces of symphonic band literature (spring). Meets MWF. An audition may be required to participate in the ensemble. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 565 | Acting for Singers | Process class with exercises specifically developed to assist the student actor to learn the fundamental techniques of acting with an emphasis on the actor's approach to characterization. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 565 or 598 (Acting for Singers) |
| MUP | 566 | Broadway Dance | Designed for students in the collaborative performance areas of musical theatre (music, theater and dance). Examines the development of landmark styles and theories specifically in musical theater and Broadway dance. | N | STO | Y | GNA | Herberger Inst Design & Arts | School of Music | 3 | | Pre-requisites: Graduate Music major who has passed an audition; Credit is allowed for only MUP 566 or 598 (Musical Theatre: Dance) |
| MUP | 570 | Music Theatre: Techniques | Exercises and improvisations for the singing actor emphasizing body awareness, isolations, and freedom of the vocal and breath mechanisms. Section 1 (Interpretation); Section 2 (Expression); Section 3 (Movement for Singers). Each Section: 3 hours per week. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

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| MUP | 571 | Music Theatre: Workshops | Development of specific skills for the musical-dramatic interpretation. Section 1 (Role Preparation); Section 2 (Styles); Section 3 (Opera Scenes); Section 4 (Musical Comedy); Section 5 (Revue Ensembles). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 573 | Music Theatre: Performance | Participation in Lyric Opera Theatre productions. Section 1 (Principal Roles); Section 2 (Chorus). | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 574 | Music Theatre: Production | Introduces technical music theatre. Classroom study of costumes, sets and lighting (Section 1, Topic: Tech) followed by practical experience on a technical running crew for a Lyric Opera Theatre production (Section 2 Topic: Problems). The two sections should be taken in consecutive semesters. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 576 | New Music Ensemble | Rehearsal and performance of music written in the last 20 years. May be repeated for credit. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 579 | Chamber Music Ensembles | String, brass, woodwind, percussion, keyboard, vocal, and mixed ensembles. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 581 | Performance Pedagogy and Materials | Principles and methods of performance techniques for each performance field. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 585 | Percussion Ensemble | Rehearsal and performance of standard and original repertoire for the percussion ensemble and related instruments. 2 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 586 | Jazz Band | Rehearsal and performance of new, traditional, and Latin literature for jazz bands. 4 hours per week. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 587 | Ethnomusicology Ensembles | Performance learning experience for the music of various cultures of the world. May be repeated for credit. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | |
| MUP | 588 | Collaborative Piano | Piano accompaniments found in vocal and instrumental literature; discussion of styles and performance practices; experience in public performance. 2 hours per week. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 596 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 597 | Solo Performance | See MUP 596. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |

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| MUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Graduate Music major who has passed audition |
| MUP | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 727 | Studio Instruction | Minimum contact of 1 hour per week. May be repeated for credit. Conducting students register for 2 semester hours; all other students register for 4 semester hours. | Y | STO | Y | OPT | Herberger Inst Design & Arts | School of Music | 2-4 | | Prerequisite(s): Doctoral Music major who has passed audition |
| MUP | 751 | Seminar in Piano Literature | In-depth study of selected topics related to the standard piano literature. Requires research paper, bibliography, class presentation. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Music | 2 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Herberger Inst Design & Arts | School of Music | 1 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 796 | Solo Performance | May be full recital, major operatic role, solo performance with orchestra, ensemble, or lecture recital. | N | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | Pre- or corequisite(s): Doctoral Music major who has passed audition |
| MUS | 100 | Fundamentals of Music Notation | Provides nonmusic majors with sufficient symbol literacy to begin work in the field of musical learning. Credit not applicable toward any music degree. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | |
| MUS | 131 | Bach to Bebop | Develops an understanding of the repertoire for the various musical instruments and ensembles throughout the five eras being studied and discernment through listening different genres of music. For the lectures regarding instruments, introduces students to the respective repertoire for the instrument from c. 1700-present with special emphasis on how the use of the instrument developed throughout history or during each era. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | | Credit is allowed for only MUS 131 or 194 (Performance: Bach to Bebop) |
| MUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 210 | The Arts Around Us | Develops the ability to think and create from an arts-rich perspective. In particular, focuses on the arts in the lives of children and youth, arts experiences for children and youth in the community, and one's personal experiences with the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 210 or 294 (The Arts Around Us) |

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| MUS | 211 | Dance, Music and Meaning | Explores the fundamental nature of human experience across time and culture through the medium of dance and music using a variety of dance and musical materials including folk dance and music, popular dance and music, and such theatrical forms as ballet and modern dance and the music connected with them. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 211 or 294 (Dance, Music, and Meaning) |
| MUS | 212 | Music, Meaning and Imagination | Explores how music provides ways to make meaning of the world around us and music as a medium for creative thinking and doing. Develops understanding by trying on roles ranging from critics to creators in both individual and group projects. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 212 or 294 (Music, Meaning and Imagination) |
| MUS | 213 | Critical Thinking in the Arts | Fosters critical thinking abilities in relationship to performing and visual arts. Students learn how to listen to music and view art analytically. Develops and applies knowledge of common elements (within and across art forms) such as form, texture, balance and contrast in order to enhance understanding both of arts processes and products. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 214 | Art, Music and Learning | Offers an integrated introduction to, and examination of, the core structural and formal elements of visual art and music in the context of contemporary experiences and learning process. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 215 | Children, Creativity, Arts | Interdisciplinary exploration of children's creative processes through critical analysis, hands-on participation and personal reflection. Specifically focuses on creative processes in the arts. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | |
| MUS | 231 | Laughing to Music | Modern-day comedies like Spamalot, Avenue Q, and Glee are part of a comic tradition extending back to the Renaissance. Looks at funny in music from commedia dell'arte to the present. Studies works including the comedies of Mozart, Gilbert and Sullivan, the Marx Brothers, Monty Python, Mel Brooks and many others. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 231 or 294 (Laughing to Music) |
| MUS | 240 | Listening to Music | Surveys the historical periods of music making in western civilization, the study of which will hopefully create within the student a listener with an appreciation for art music of many periods and provide more enjoyment in the process. Through lectures, presentations, readings, listening examples and video/DVDs, studies music identified as strong examples of the major periods, composers and compositions in the history of music. Students learn and adopt a minimum new language to help express the elements of music they experience and listen to and develop strategies for writing and communicating about what they hear and put words to how they respond to it. Because experiencing music performed live is an integral part of the learning process, students are required to attend concerts outside of class and submit critical reviews of what they hear. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| MUS | 254 | Blues to Heavy Metal | Covers important musicians and trends from the 1930s through the 1970s. Topics include blues, rhythm and blues, rockabilly, doo wop, teen idols, girl groups, dance craze, surf, novelty, soul, Motown, British invasion, art rock, psychedelic rock, hard rock, heavy metal, and early '70s styles. Emphasizes musical instruments and stylistic traits with historical information provided as background. Features listening examples drawn from selected artists and bands including popular songs and rarities, and demonstrations using various musical instruments and techniques. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Credit is allowed for only MUS 254 or 354 (Blues to Heavy Metal) |
| MUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 340 | Music for the Concert Hall, Stage, and Screen | In-depth study of examples from Western art music. Emphasizes aural analysis and synthesis of historical data with musical phenomena. Critiques the canon and its limits in specific instances. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & H | Prerequisite(s): minimum 42 hours |
| MUS | 347 | Jazz in America | In-depth study, analysis and synthesis of examples from the jazz tradition. Includes the application of advanced aural analytic techniques to exemplary jazz musical works. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: ENG 102, ENG 105 or ENG 108 with C or better |
| MUS | 349 | Music in America | Current styles of American music including jazz, popular, and folk music. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| MUS | 354 | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): minimum 42 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| MUS | 354 | Popular Music | In-depth study of a specific topic in the history of popular music. Emphasizes aural analysis and synthesis of historical data with musical phenomena to create new perspectives. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 42 hours |
| MUS | 355 | American Music | In-depth study of current research topics in American music. Engages students in current scholarly debates. Charts the limits of current scholarly methodologies and historical research programs. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | Prerequisite(s): minimum 42 hours |
| MUS | 356 | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| MUS | 356 | Broadway and the American Musical | In-depth chronological study of American musical theatre on Broadway, including origin and development, historical references, global and cultural influences. By way of critical analysis, emphasizes comprehensive stylistic understanding of minstrelsy, operetta, revues, book musicals, film musicals, rock musicals, mega-musicals, and Broadway revivals. Engages students in current scholarly debates on American musical theatre. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| MUS | 362 | Rap Music and Hip Hop Culture | Examines the history of rap music and hip hop culture from their origins to about 1995, including most, but not all, of the major artists from this period. Explores connections between rap music and other elements of hip hop culture, and challenges students to think critically about rap music and its place in society. Uses listening exercises, demonstrations, and conversations with artists to examine how rappers create meaning in their musical works. Drawing on secondary articles by rap critics and scholars, considers in detail such controversial subjects as censorship, sexism, obscenity, and race politics in America as they relate to rap music. | N | LEC | N | GNA | Herberger Inst Design & Arts | School of Music | 3 | HU & C | Pre-requisite: Minimum 42 hours; Credit is allowed for only MUS 354 (Hip Hop) or 362 |
| MUS | 371 | World Music | Provides an introduction to world music, including traditional and popular styles. Examines specific music genres from Africa, Asia, Europe, and the Americas and explores their historical development, cultural contexts, communicative functions, forms, styles, instruments and musical philosophies. Throughout the semester, considers the interrelationships among musical genres and other art forms (dance, theater, visual arts, and literature) and analyzes how these musics have intersected with the issues of race, class, gender, religion, ritual, politics, social movements and cultural identity. Students learn to hear and discuss significant stylistic elements of selected genres through listening assignments. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & G | Pre-requisite: Minimum 45 hours; Credit is allowed for only MUS 371 or 394 (World Music) |
| MUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 410 | History of Women in Music | Surveys musical achievements of women as well as the historical contexts that shaped and defined their artistic development. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Music | 3 | HU & C & H | |
| MUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Music | 1-6 | L | Prerequisite(s): Barrett Honors student |
| MUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-6 | | Prerequisite(s): Barrett Honors student |
| MUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-7 | | |

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| MUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| MUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-3 | | |
| MUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| MUS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| MUS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-4 | | |
| MUS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| MUS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |

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| MUS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Music | 1-12 | | |
| MUS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| MUS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Herberger Inst Design & Arts | School of Music | 1-15 | | |
| NAN | 505 | Nanoscience and Society | Integrates nanoscience and nanotechnology with potential societal issues involved in the students' NAN 593 Applied Projects. Coordinated by the faculty and research staff at the Center for Nanotechnology in Society. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 506 | Innovation and IP Management | Intellectual Property (IP) Management in the context of innovation (research, regulations, manufacture, access to markets, and trade) with emphasis on strategies, public-private interface, licensing, and technology transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 2 | | |
| NAN | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511, or PHY 481 |
| NAN | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| NAN | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| NAN | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| NAN | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| NAN | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, PHY552 or SEM 552 |
| NAN | 560 | Nanomaterials in Energy Production and Storage | Emphasizes the relationship among fundamental materials properties, chemical and energy transformation, as well as energy storage. Applications include the role of materials for photovoltaics, nanocatalysts, batteries, and fuel cells. Stresses fundamental principles and charge transfer processes in nanostructured materials in addressing energy needs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): graduate Chemistry, Engineering or Physics major. Credit is allowed for only MSE 460 or MSE 494 (Nanomaterials In Energy Production and Storage) or MSE 560 or MSE 598 (Nanomaterials In Energy Production and Storage) or NAN 560 |
| NAN | 564 | Bionanotechnology | The use of biomolecules, bioelectronics, and biomedicine for applications in nanotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |

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| NAN | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |
| NAN | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| NAN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| NAV | 101 | Introduction to Naval Science | Introduces the customs, traditions, missions and regulations of the Department of Defense, United States Navy and United States Marine Corps. Introductory course for the Naval Reserve Officer Training Corps (NROTC) by laying the basic foundation of knowledge about the Navy and Marine Corps required to progress through the NROTC program. Also provides the requisite knowledge to allow follow-on shipboard summer training to be safely and effectively conducted. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | |
| NAV | 102 | Sea Power and Maritime Affairs | Informs the participants of the historical evolution of sea power for the U.S. Navy and world history. Also covers the evolution of international terrorism and the effects on U.S. strategies and policies regarding potential adversaries. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Credit is allowed for only NAV 102 or NAV 194 (Sea Power and Maritime Affairs) |
| NAV | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NAV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 202 | Navigation | Basic principles, procedures and analytic processes of marine navigation. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Credit is allowed for only NAV 202 or NAV 294 (Navigation) |
| NAV | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 301 | Naval Ship Systems I | Provides detailed knowledge of naval engineering systems and principles of ship construction. Topics covered include ship design, hydrodynamic forces, stability, conventional and nuclear propulsion, electrical theory and systems, hydraulics and ship control. Concepts of the theory and design of steam, gas turbine and diesel propulsion. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 301 or NAV 394 (Navy Ship Systems I - Engineering) |
| NAV | 302 | Naval Ship Systems: Weapons | Overview of the theory and concepts underlying modern weapon systems used aboard naval warships. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours. Credit is allowed for only NAV 302 or NAV 394 Naval Ship Systems II: Weapons |
| NAV | 303 | Evolution of Warfare | Provides marine option students with a basic understanding of the art, science and concepts of war from the beginning of recorded history to the present day. Addresses the interrelationships among technology, politics, culture and society to better understand warfare today and in the future. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours. Credit is allowed for only NAV 303 or NAV 394 Evolution of Warfare |
| NAV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 401 | Naval Operations and Seamanship | In-depth study of numerous aspects relating to the efficient and professional manner of U.S. Navy ships' operations. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 401 or NAV 494 (Naval Operations and Seamanship) |
| NAV | 402 | Leadership and Ethics | Applies leadership and ethical theories discussed to an actual leadership or ethical dilemma or issue that Junior Officers in the Fleet or FMF are currently facing or have faced in the recent past. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 402 or NAV 494 (Leadership and Ethics) |
| NAV | 403 | Amphibious Warfare | Focuses on the historical aspect of amphibious operations. Emphasizes how the development of this war fighting discipline played a key role throughout much of the early history of the Marine Corps. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Naval Science | 3 | | Prerequisite(s): minimum 30 hours; Credit is allowed for only NAV 394 (Amphibious Warfare) or NAV 403 |
| NAV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Naval Science | 1-4 | | |
| NAV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | Department of Naval Science | 1-3 | | |
| NEU | 555 | Advanced Molecular and Cellular Sciences | Study of structural and functional organization of biomolecules and cells, based on current literature. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MCB 555 or NEU 555 |

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| NEU | 556 | Human Systems Neuroscience | Systems-level neuroscience course focusing on human diseases. Classes involve lectures and/or other activities such as observations of clinical procedures and tours of clinical facilities (e.g., the neurosurgical suite, imaging facilities). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisite: Neuroscience PhD major. Credit is allowed for only BIO 598 (Human Sys Neuroscience), BME 556 or NEU 556 |
| NEU | 558 | Neuroscience Journal Club | Small class emphasizing discussion, presentation by students, and written research papers. | N | SEM | Y | GNA | Liberal Arts and Sciences | School of Life Sciences | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| NEU | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Pre-requisites: Interdisciplinary Graduate Program in Neuroscience PhD students |
| NEU | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | GRD | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NEU | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 160 | Voluntary Action and Community Leadership | Introduction to voluntary behavior in American society for students interested in volunteerism, community service, and civic engagement. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |
| NLM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| NLM | 220 | Introduction to Nonprofit Organizations | Introduces the nonprofit sector and its role in developing the cultural, economic, and social impact in U.S. society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 235 | Leadership and Ethics | Examines ethical questions faced by emerging leaders. Focuses on helping students develop emotional intelligence, current professional issues, and the refinement of a professional philosophy and comprehensive set of competences that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CRD 235 or NLM 235 |
| NLM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |

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| NLM | 300 | Fund Raising and Resource Development | Theory and practice of philanthropy, resource acquisition methods through ethical fund raising, and earned income approaches for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| NLM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| NLM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142 or higher; NLM 160 (or PRM 120) with C or better; Minimum 2.50 GPA; Minimum 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| NLM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| NLM | 320 | Professional Development Seminar | Professional seminar featuring nonprofit executives; variable topics on leadership and management concerns. Forum for exchange between students and professionals. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisites: Nonprofit Leadership Alliance (formerly American Humanics) certification program student |
| NLM | 380 | Financial Management for Nonprofit Organizations | Instructs students about nonprofit financial, management, and social accounting; accounting issues specific to nonprofits; budgeting; reporting; and nonprofit analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Nonprofit Leadership and Management major students or Nonprofit Administration minor students or American Humanics Certificate students; NLM 220 with a C or better |
| NLM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| NLM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre- or corequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better if completed; Credit is allowed for only CSM 402 or NLM 402 or PRM 402 or TDM 402 |
| NLM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| NLM | 410 | Social Entrepreneurship | In-depth study of social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or NLM 210; NLM 220. Credit is allowed for only NLM 410 or NLM 562 |
| NLM | 420 | Nonprofit Leadership Alliance Institute | Nonprofit Leadership Alliance Institute for preparation of nonprofit professionals. Requires out-of-state conference. | Y | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-2 | | Pre-requisite: Nonprofit Leadership Alliance (formerly American Humanics) certification program students |
| NLM | 430 | Managing Nonprofit Organizations | Analyzes administrative structures, decision making, and program delivery within nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): NLM 220 and 300 with C or better; senior standing |
| NLM | 435 | Service Learning for Community Development | Applies youth and adult development theories through community service immersion in collaboration with local nonprofit partners. | N | REC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CRD 435 or NLM 435 |
| NLM | 451 | Grant Writing | How to increase grant funding; creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |
| NLM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| NLM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |
| NLM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NLM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |

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| NLM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| NLM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | L | |
| NLM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| NLM | 510 | The Nonprofit Sector | Provides grounding in scope, function and philosophical foundations of the nonprofit sector in American society, including civic engagement, service delivery, reproduction of values and entrepreneurship. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 520 | Financial and Resource Management | Baseline understanding of key and critical financial management issues and practices for nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 525 | Fundraising and Resource Development | Examines fundraising and resource development in philanthropy from the perspective of the nonprofit practitioner. Also examines issues confronting nonprofit organizations related to fundraising and philanthropic purposes in society. Increases students' knowledge and understanding of charitable giving and fundraising—who gives to what, why, and how to raise funds for a cause. Examines a wide range of fundraising methods and tools. Focuses on critical thinking, reflection on practice, collaboration, discussion and writing. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 530 | Program Evaluation and Information Management | Develops skills in several areas, including evaluation, needs assessment, information and data collection, data management and analysis, computer applications, and report writing. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 540 | Strategic Human Resources Management | Managing human resources in nonprofit organizations; practices and theories. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 545 | Volunteer Resource Management | Core topics in effective management of volunteers in carrying out the mission of organizations and ensuring volunteers have good experience with community organizations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only NLM 545 or 598 (Volunteer Resource Management) |
| NLM | 550 | Philanthropy | Examines the role of philanthropy and charitable giving in contemporary American society from perspectives of the nonprofit practitioner, the philanthropist and the general public. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 560 | Leadership and Ethics in the Nonprofit Sector | Examines leadership and ethical questions encountered by managers and leaders in the nonprofit organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 562 | Social Entrepreneurship | Introduces social entrepreneurship, including how ideas are formulated, constructed, and implemented; experiential learning in developing a social enterprise plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 410 or 562 |
| NLM | 565 | Grant Writing Nonprofit Organizations | Provides practical, experiential instruction identifying grant makers, writing proposals, developing budgets, and evaluating grant proposals for the nonprofit sector. Students develop proposals based on actual, identified needs of their partner nonprofit organization. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only NLM 451, 565 or PRM 451 |
| NLM | 570 | International Non-Governmental Organizations | Increases knowledge and understanding of international non-governmental organizations by examining what these organizations do and how they operate in a cross-cultural context. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 572 | Community and Social Innovations | Considers community innovation and development from the perspective of achieving balance among economic, environmental, social, physical and political realms as a framework of sustainability. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CRD, NLM 572 or NLM 598 (Community & Social Innovations) |
| NLM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NLM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | |
| NLM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 605 | Nonprofits, Law and Society | Enhances the legal sensibilities of nonprofit leaders and engaged stakeholders. This necessitates critical in-depth understanding of: (1) legal needs common to all nonprofit organizations, regardless of mission or area of focus such as nonprofit corporation law, tax-exempt status, fiduciary duties and fundraising and lobbying ethics and parameters; (2) commonalities among nonprofit, for-profit and governmental enterprises operating within similar spheres of society, especially the importance of nonprofit organizations' compliance with laws generally applicable to specific subsectors such as contracts, labor and employment, volunteer and premises liability, and intellectual property; and (3) the overall importance and impact of legal structures on nonprofit organizations' abilities to successfully pursue their missions for the benefit of society. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 610 | Executive Leadership and Governance | Examines the multiplicity of roles for executives and board of directors in providing strategic leadership for nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NLM | 620 | Capstone: Integrative Seminar | Improves understanding of trends emerging within nonprofits such as leadership, resource development, and social responsibility. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite: Master of Nonprofit Studies major |
| NTR | 100 | Introductory Nutrition | Basic concepts of human nutrition. Recent controversies in nutrition and how food choices affect personal health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 100 or 241 |
| NTR | 142 | Applied Food Principles | Applied scientific principles of food preparation and production. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Nutrition (Dietetics or Food and Nutrition Management or Food and Tourism Management or Human Nutrition or Nutrition Communication) major OR Food and Nutrition Management minor OR Child Nutrition certificate |
| NTR | 150 | Introduction to the Professions in Nutrition and Dietetics | Introduces the professions of nutrition and dietetics; their history, practice, and future; credentials, ethics, and standards of practice. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | |
| NTR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 241 | Human Nutrition | Principles of human nutrition. Emphasizes nutrient metabolism and the relationships between diet and disease. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: CHM 101 or 113 |
| NTR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |

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| NTR | 300 | Computer Applications in Nutrition | Introduces nutrition and food software, including dietary assessment and analysis, food inventory and control, and telecommunications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | CS | Pre-requisites: NTR 100 or 241 |
| NTR | 320 | History of Human Nutrition | Origins of human nutrition; evolving theories of nutrition and disease; historical role of nutrition in social, military, cultural events. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 340 | Principles of Evidence-Based Nutrition | Investigates methods of inquiry in human nutrition and techniques for critiquing and interpreting research within the context of evidence-based practice; utilizes evidence-based practice methods to explore current controversies in the nutrition field. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): BIO 201; NTR 241 |
| NTR | 341 | Medical Nutrition Therapy I | First in a three-course sequence in medical nutrition therapy. Introduces the study of nutritional therapy of disease and evidence-based practice in prevention and nutritional management of diseases. Nutrition care planning for chronic diseases is taught via a variety of methods including case studies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 343 | Food Service Purchasing | Introduces purchasing systems, bid processes, receiving and storage procedures, and regulatory agencies involved in the food service industry. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or 241 |
| NTR | 344 | Nutrition Management and Leadership | Organization, administration, management and leadership in the nutrition field within healthcare, food service and other institutions. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Prerequisite(s): NTR 100 or NTR 241 |
| NTR | 345 | Development of Healthy Cuisines | Principles and applications of nutrition, food selection, food preparation and mindful eating in the development of healthy cuisine for wellness, prevention and disease states. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 or 241 |
| NTR | 348 | Cultural Aspects of Food | Origins, development, and diversity of food preferences and dietary habits; food patterns and attitudes of global populations and U.S. immigrants. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB & C & G | Pre-requisites: NTR 100 or 241 |
| NTR | 350 | Nutrition Counseling | Counseling techniques in nutrition; interpersonal and communication skills in clinical and community sites; nutrition education for individuals and populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 341 with C or better or NTR 345 |
| NTR | 351 | Nutrition and Health Communications | Approaches of nutrition and health communications; development of nutrition and health communication materials for selected target audiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Prerequisite(s): ENG 101, 105, or 107 with C or better; NTR 100 or 241 |
| NTR | 353 | Perspectives on the Western Diet: Food, Health and Sustainability | Hybrid course covering political, ethical, social and cultural issues inherent in the U.S. food system. Topics include examination of U.S. food guidance; the food system and food environment; the history of food and farm policy; food security and aspects of sustainability in relation to food system impacts on the health of humans, society and the environment. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only NTR 353 or NTR 394 (The Western Diet: Food, Health, & Sustainability) or SOS 353 |
| NTR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 400 | Preprofessional Preparation in Dietetics | Applies academic knowledge in field practicum; aspects of professional development. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Pre-requisites: Nutrition/Dietetics students; Senior status; NTR 341 with C or better; NTR 440, 441 or 444 with C or better |
| NTR | 401 | Field Experience in Food and Nutrition | Applies academic knowledge in food service management to field practicum; develops practical skills in planning, purchasing, production, management. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Food and Nutrition management, Nutrition Communication, or Human Nutrition students; Senior standing; Pre/Co-requisites: NTR 351, 343 or 444 |
| NTR | 440 | Advanced Human Nutrition I | Metabolic reactions and interrelationships of vitamins, minerals, and water. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 202 with C or better; NTR 241 with C or better; NTR 340 with C or better; Credit is allowed for only NTR 440 or 540 |
| NTR | 441 | Advanced Human Nutrition II | Metabolic reactions and interrelationships of carbohydrate, lipid, and protein. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BCH 361 with C or better; BIO 202; NTR 241; Credit is allowed for only NTR 441 or 541 |
| NTR | 442 | Experimental Functional Foods | Food product development techniques, food evaluation and testing, and investigation of current research into food composition. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: CHM 101 or CHM 113; NTR 142; NTR 100 or NTR 241 |
| NTR | 444 | Medical Nutrition Therapy II | Second in a three-course sequence in medical nutrition therapy. Covers the principles of medical nutrition therapy for prevention and treatment of disease and promotion of health. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): BIO 202; NTR 341 with C or better; Credit is allowed for only NTR 444 or NTR 544 |
| NTR | 445 | Management of Food Service Systems | Standardized methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: NTR 100 or NTR 241; NTR 142; NTR 343; Credit is allowed for only NTR 445 or 545 |
| NTR | 446 | Medical Nutrition Therapy III | Third in a three-course sequence in medical nutrition therapy. Content includes hands-on assessment techniques, evaluation and interpretation of laboratory data, and nutrition support with relation to disease process and progression. Nutrition assessment is taught via a variety of methods including case studies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 444 with C or better; Pre/Co-requisites: BCH 361; Credit is allowed for only NTR 446 or 546 |
| NTR | 448 | Community Nutrition | Food-related behaviors; organization and delivery of nutrition services; program design, implementation, and evaluation strategies; nutrition assessment of populations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | L | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 448 or 548 |

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| NTR | 450 | Nutrition in the Life Cycle | Nutritional needs and problems in pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | SB | Pre-requisite: NTR 100 or NTR 241; Credit is allowed for only NTR 450 or 550 |
| NTR | 453 | Nutrition and the Media | Examines the promotion of nutrition ideas and concepts through media. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 453 or 494 (Nutrition and the Media) |
| NTR | 455 | Retail Food Service Operations | Development, evaluation and management of retail food service operations; legal and ethical issues in food and beverage management. Capstone course for food management degrees. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: NTR 100 (or 241); Junior standing |
| NTR | 457 | Sports Nutrition | Nutritional needs of recreational and elite athletes; energy balance; nutrient metabolism during activity; fluid-electrolyte regulation; evaluation of ergogenic supplements. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: BIO 201; NTR 241 |
| NTR | 460 | Nutrition Entrepreneurship | Exploration of entrepreneurial opportunities in nutrition, food service, wellness and health communications. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Minimum 45 hours; Credit is allowed for only NTR 460 or 494 (Nutrition Entrepreneurship) |
| NTR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | | Prerequisite(s): Barrett Honors student |
| NTR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NTR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | |
| NTR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-7 | L | |
| NTR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-3 | | |
| NTR | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 501 | Research Methods in Nutrition II | Reviews survey, focus group, and epidemiologic research; develops questionnaires; analyzes large data sets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 503 | Designing Health Behavior Change Interventions | Project-based course focuses on the process of health behavior change interventions using design process and behavioral science. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only NTR 503 or 598 (Designing Health Behavior Change Interventions) |
| NTR | 523 | Vegetarian Nutrition | Health benefits, nutritional characteristics, potential risks of vegetarian diets. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 525 | Complementary Nutrition | Critical review of functional foods, phytochemicals, nutrient supplements in health promotion. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 527 | Policies, Environment, and Obesity Prevention | Enhances students' understanding of the role policies and environments play in health promotion and disease prevention with a special focus on obesity prevention. Looks at a variety of examples to see how policies and environments related to food, nutrition and physical activity affect individual and community health. Also explores how "non-health" policies can be used as an effective tool to promote healthy behaviors. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 529 | Pediatric Nutrition | Critical review of pediatric disease states and current nutritional therapies. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 530 | Techniques of Health Coaching | Health coaching techniques and skills for medical, allied health and health promotion professionals. The content illustrates the theory, principles and practices of evidence-based coaching psychology. Aligns with the training programs affiliated with Wellcoaches® (endorsed by the American College of Sports Medicine). Designed in three parts: (1) building of core coaching skills; (2) establishing generative moments with clients; and (3) developing coaching presence and positive psychology. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSC 440 or NTR 530 |

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| NTR | 532 | Endocrine Pathophysiology and Nutrition | Explores the etiology of various endocrine pathophysiological conditions. Throughout the course, students learn the etiology of common conditions and are responsible for finding and presenting evidence for nutrition-based treatments for these conditions. At the conclusion of the course, students gain an appreciation and understanding of current research in nutrition-based approaches to treat endocrine disorders. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 533 | Ethics and Policy of American Diets | Political and ethical issues inherent in the U.S. food system. Topics include food and agricultural policy, government dietary recommendations and regulations, food environment, current issues in food politics, ethical questions of food choice, issues of obesity and food security, sustainability, and investigation of how and why Americans eat the way they do. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 535 | Nutrigenomics | Provides a sound foundation for promoting personalized nutrition by integrating and applying molecular nutrition and nutritional biochemistry to clinical settings. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Pre-requisite: BCH 361; BCH 367; NTR 440 or 441 |
| NTR | 537 | Evidenced-Based Nutrition | Reviews current evidence of the role of diet on disease prevention, development, and management. | N | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 539 | Global nutrition | Provides an overview of global nutrition issues, including the epidemiology, etiology, sociocultural and economic context, and program and policy responses to nutrition-related topics. Areas to be covered include childhood malnutrition, growth stunting, micronutrient deficiencies, parasites and nutrition, sanitation, and obesity and chronic disease incidence in developing countries. Course is participatory; students engage in a series of class activities, discussions, and presentations. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | |
| NTR | 540 | Advanced Micronutrient Metabolism | Metabolism of vitamins and minerals, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 440 or 540 |
| NTR | 541 | Advanced Macronutrient Metabolism | Metabolism of protein, fat, and carbohydrate, primarily as applied to humans, with research literature emphasized. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 441 or 541 |
| NTR | 544 | Therapeutic Nutrition | Current theories of the nutritional prevention or treatment of various diseases. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 444 or 544 |
| NTR | 545 | Management of Institutional Food Service Systems | Standardizes methods of quantity food preparation, operation of institutional equipment, institutional menu planning, quantity food experiences. May require field trips. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 445 or 545 |
| NTR | 546 | Assessment Techniques in Nutrition | Clinical and biochemical evaluation of nutritional status. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 446 or 546 |
| NTR | 548 | Advanced Community Nutrition | Planning, development, implementation, and evaluation of community nutrition programs, including the process of grant applications. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Credit is allowed for only NTR 448 or 548 |
| NTR | 550 | Advanced Nutrition in the Life Cycle | In-depth review of metabolic characteristics and nutritional needs during pregnancy and lactation, infancy, childhood, adolescence, adults and older adults. Analysis of cultural, environmental, behavioral, psychosocial, physical and socio-economic factors affecting nutritional status through the life span. | N | LEC | N | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only NTR 450 or NTR 550 |
| NTR | 551 | Geriatric Nutrition | Explores the impact of nutrition on the aging process and how the aging process influences nutritional needs. Examines the physiology, demographics and economics of aging as well as issues such as end-of-life care. Addresses health promotion, disease prevention and disease management within the context of geriatric nutrition. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 553 | Nutrition and Cardiovascular Disease | Reviews current evidence of the role of diet on cardiovascular disease prevention, development and management. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): NTR 541. Credit is allowed for only NTR 553 or NTR 598 (Nutrition and Cardiovascular Disease) or NTR 537 (Cardiovascular Nutrition) |
| NTR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| NTR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| NTR | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NTR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 310 | Nursing Concepts | Theoretical concepts related to health integrity focusing on the individual client across the life span. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BSN Nursing major in clinical program |
| NUR | 311 | Pharmacology | Applications of pharmacologic interventions. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 312 | Psychomotor Skills for Professional Nursing Practice | Theoretical foundation for application of psychomotor nursing skills to professional nursing practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): Nursing major in clinical program. Credit is allowed for only NUR 312 or NUR 394 |
| NUR | 313 | Nursing Concepts for Adult Health | Nursing concepts related to selected alterations in health with focus on adult populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; NUR 320 with Y passing grade; Corequisite(s): NUR 323; Credit is allowed for only NUR 313 or NUR 394 (Nursing Concepts for Adult Health) |
| NUR | 315 | Nursing Research and Application to Practice | Provides scientific and clinical inquiry and research methodology along with concepts needed for integration of evidence into practice. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Prerequisite(s): Traditional BSN or Post Baccalaureate BSN: NUR 330 with C or better. RN/BSN: TWC 361 with C or better; NUR 391 with C or better |
| NUR | 316 | Nursing Concepts for Psychiatric/Mental Health | Theoretical concepts related to select psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families, and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 with C or better if completed; NUR 311 with C or better if completed; NUR 330 with C or better if completed |
| NUR | 317 | Nursing Concepts for Psychiatric/Mental Health Nursing | Theoretical concepts related to select and/or prevalent psychiatric/neurobiological disorders as they affect nursing practice, with focus on individuals, families and groups. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s): NUR 311; NUR 330; NUR 356; NUR 366; Corequisite(s): NUR 367; Credit is allowed for only NUR 317 or NUR 494 (Nursing Theory for Psychiatric Mental Health) |
| NUR | 320 | Nursing Practice | Integrates knowledge and attitudes from theory into the nursing care of adults in a variety of health care settings. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Prerequisite(s): Nursing major in clinical program; Corequisite(s): NUR 310; NUR 311; NUR 312; NUR 330 |
| NUR | 323 | Nursing Practice Adult Health | Applies nursing process with selected alterations in health with focus on adult populations in the acute care setting. | N | LAB | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; NUR 320 or NUR 484 (Nursing Practice) with Y passing grade if completed; Corequisite(s): NUR 313 or NUR 394 (Nursing Concepts Adult Health) |

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| NUR | 324 | Nursing Practice: Psychiatric/Mental Health | Application of nursing process, critical thinking, clinical decision making with individuals, families, and groups experiencing acute/chronic alterations in mental health and/or psychiatric disorders. | N | SEM | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 310 and NUR 311 and NUR 330 all with C or better if completed; Corequisite(s): NUR 316; Credit is allowed for only NUR 324 or NUR 484 (Nursing Practice: Psychiatric/Mental Health) |
| NUR | 330 | Professional Nurse Attributes | Professional nursing roles and responsibilities. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | HU | Pre-requisites: Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major |
| NUR | 356 | Nursing Theory I | Focuses on the knowledge and skills essential to maintaining the health and wellness of clients across the lifespan and the concepts related to selected alterations in health in the adult population. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Prerequisite(s): Nursing major in clinical program or postbaccalaureate Clinical Nursing Program major; Pre- or corequisite(s): NUR 311 |
| NUR | 366 | Nursing Practice I Post Baccalaureate | Applies knowledge and skills essential to maintaining health and wellness in clients across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 6 | | Pre-requisite:Nursing major in clinical program OR postbaccalaureate Clinical Nursing Program major. Pre- or corequisite(s): NUR 356 |
| NUR | 367 | Nursing Practice: Psychiatric/Mental Health | Applies nursing process, critical thinking, clinical decision-making with individuals, families, and groups experiencing acute and/or chronic alterations in mental health and/or psychiatric disorders. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed |
| NUR | 384 | Gerontological Nursing | Focuses on optimizing the health of older adults and the management geriatric syndromes and chronic conditions. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre- or corequisite(s): NUR 330 with C or better if completed |
| NUR | 391 | Professional Nursing Theory | Analyzes the multiple dimensions of contemporary professional nursing. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | L | Prerequisite(s): ENG 101 with C or better; ENG 102 with C or better; Corequisite(s): TWC 361 |
| NUR | 392 | Health Promotion Across the Life Span | Examines concepts and theories involved in health promotion across the lifespan and their application for nurses. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 |
| NUR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 410 | Nursing Concepts for Community and Public Health | Examines concepts related to health promotion, disease prevention, and health maintenance within the global community. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and 315 and 316 all with C or better if completed; NUR 323 and 324 with Y grade if completed; Corequisite(s): NUR 420 or 484 (Nur Pract: Comm/Pub Hlth); Credit allowed for only NUR 410 or 494 (Nur Concepts Comm & Pub Hlth) |
| NUR | 411 | Nursing Concepts for Child bearing and Pediatric Clients | Concepts related to care of individuals and families within the childbearing and pedetic populations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and 315 and 316 all with C or better if completed; NUR 323 and 324 with Y passing grade if completed; Corequisite(s): NUR 421; Credit is allowed for only NUR 411 or 494 (Nursing Concepts Childbearing Individ & Families) |
| NUR | 412 | Nursing Concepts for Pediatric Patients and their Families | Examines essential concepts related to the nursing care of pediatric patients and their families. Provides a nursing care approach for the pediatric patient and family across the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y passing grade if completed; Corequisite(s): NUR 422; Credit is allowed for only NUR 412 or NUR 394 (Nursing Concepts: Pediatrics) |
| NUR | 413 | Nursing for Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 423 |
| NUR | 415 | Nursing Concepts for Childbearing Family | Examines the care of childbearing clients and their families. Embedded content focuses on providing care to clients along the healthcare continuum. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed |
| NUR | 416 | Nursing Concepts: Community/Public Health | Examines selected concepts, theories, and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing locally and globally. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 315 and NUR 415 and NUR 417 all with C or better if completed; NUR 475 and NUR 477 with Y grade if completed; Corequisite(s): NUR 476 |
| NUR | 417 | Nursing Concepts: Pediatric Clients | Concepts related to care of individuals and families within pediatric populations. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed; Corequisite(s): NUR 477 |
| NUR | 418 | Nursing Concepts: Complex Care | Advanced theoretical knowledge and interprofessional collaborative care required for the delivery of safe and competent care of the adult client experiencing acute and complex alterations in health. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 with Y passing grade if completed; Credit is allowed for only NUR 418 or NUR 478 |
| NUR | 419 | Leading & Managing Nursing in Organizational Systems | Analyzes selected concepts and theories related to leading and managing nursing in organizational systems. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 315 and NUR 415 and NUR 417 all with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 479 |
| NUR | 420 | Nursing Practice: Community/Public Health | Applies community/public health nursing concepts in the delivery of primary, secondary, and tertiary care in a variety of community settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; Corequisite(s): NUR 410; Credit is allowed for only NUR 420 or NUR 484 (Nursing Practice: Community and Public Health) |

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| NUR | 421 | Nursing Practice: Child Bearing/Family Nursing | Applies nursing care concepts related to the child-bearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y grade if completed; Corequisite(s): NUR 411; Credit is allowed for only NUR 421 or NUR 484 (Nursing Practice: Childbearing Clients) |
| NUR | 422 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 313 and NUR 315 and NUR 316 all with C or better if completed; NUR 323 and NUR 324 with Y passing grade if completed; Corequisite(s): NUR 412; Credit is allowed for only NUR 422 or NUR 484 (Nursing Practice: Pediatrics) |
| NUR | 423 | Nursing Practice: Complex Care & Clinical Immersion | Students perform nursing practice in a variety of clinical settings, laboratory and simulated patient care environments. Students provide nursing care to patients who are physiologically unstable in advanced medical-surgical, and critical care clinical environments. Students perform advanced psychomotor skills in the clinical, laboratory and simulation environments. Students also complete a clinical immersion experience in a selected clinical setting. During the clinical immersion experience, students have the opportunity to apply leadership and management principles, and work in interprofessional healthcare teams to provide nursing care to clients experiencing health alterations across the lifespan. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 5 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 413 |
| NUR | 430 | Professional Nurse Attributes: Leadership and Management | Applications of theories and concepts of organizations, management, and leadership with focus on nursing management and leadership in healthcare organizations. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 410 and NUR 411 and NUR 412 all with C or better if completed; NUR 420 and NUR 421 and NUR 422 all with Y passing grade if completed; Corequisite(s): NUR 431 |
| NUR | 431 | Professional Nurse Attributes Innovative Professional | Focuses on the process of transition to the professional nursing role, and the gathering, interpretation, and evaluation of evidence that serves as a basis for improving client outcomes and professional satisfaction. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | L | Pre- or corequisite(s): NUR 315 with C or better if completed; NUR 330 with C or better if completed |
| NUR | 440 | Community and Public Health Nursing in the United States | Examines selected concepts, theories and applications of epidemiology, community assessment, and population-centered health education for community and public health nursing in the United States. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 391; NUR 315; TWC 361 with C or better |
| NUR | 444 | Innovation in Nursing | Examines the role and behaviors of an innovator in the nursing profession. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315; NUR 391; TWC 361 with C or better |
| NUR | 445 | Nursing Management in Health Care | Examines selected theories and concepts of organizational behavior and the management of people and resources. Focuses on the application of selected management theories and concepts to nursing practice and healthcare systems. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, NUR 391, TWC 361 with C or better |
| NUR | 460 | The Art of Nursing | Explores the aesthetic, ethical, and personal patterns of knowing in nursing for the practicing RN. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | HU | Pre-requisites: NUR 391; NUR315; TWC 361 with C or better |
| NUR | 464 | Capstone: The Synthesis of Professional Nursing | Synthesizes theories and concepts for professional nursing practice with a focus on role transition. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: BIO 202; CHM 101; MAT 142; MIC 205; NUR 392; NUR 440; NUR 444; NUR 445; NUR 460; NUR 495; PGS 101 (or CDE 232) with C or better |
| NUR | 475 | Nursing Practicum: Care of the Childbearing Family | Applies nursing care concepts related to the childbearing woman and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 and NUR 367 with Y passing grade if completed; Corequisite(s): NUR 315; NUR 415 |
| NUR | 476 | Nursing Practice: Community and Public Health | Applies community and public health nursing concepts in the delivery of primary, secondary, and tertiary prevention from a population-centered perspective. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y grade if completed; Corequisite(s): NUR 416 |
| NUR | 477 | Nursing Practice: Pediatrics | Focuses on clinical care of the pediatric client and family. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 311 and NUR 330 and NUR 356 all with C or better if completed; NUR 366 and NUR 367 with Y passing grade if completed; Corequisite(s): NUR 315; NUR 417 |
| NUR | 478 | Nursing Practice: Complex Care | Applies advanced psychomotor and leadership skills, nursing care delivery management, and interprofessional referral and collaboration for clients experiencing health alterations across the lifespan in advanced care settings. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 418 |
| NUR | 479 | Nursing Practice: Clinical Immersion | Builds on the knowledge and skills obtained in the nursing curriculum and integrates the curriculum concepts in varied and diverse practice settings. Supports the student's transition into the role of the professional registered nurse. | N | PRA | N | YGB | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Pre- or corequisite(s): NUR 415 and NUR 417 with C or better if completed; NUR 475 and NUR 477 with Y passing grade if completed; Corequisite(s): NUR 419 |
| NUR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |

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| NUR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| NUR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Upper Division Nursing Program students |
| NUR | 495 | Public and Global Health in Nursing | Analyzes public health concepts, theories, and practice with a focus on the health of all clients in a global environment. Includes core public health functions, domestic and international health care delivery systems, public health and health policy, conceptual and scientific frameworks for community/public health nursing practice, epidemiology, and global health issues. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 4 | | Pre-requisites: NUR 315, 391, and TWC 361 with C or better |
| NUR | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-6 | | Prerequisite(s): Barrett Honors student |
| NUR | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-7 | L | Pre-requisites: Upper Division Nursing Program students |
| NUR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-3 | | |
| NUR | 501 | Individual and Innovation Leadership in Advanced Nursing Practice | Examines the role and behaviors of an innovator in an advanced nursing practice role. Explores the skills required to create a compelling vision to influence others through innovation and ethical leadership. Examines and correlates different situational challenges utilizing principles of complexity and emotional intelligence to advance innovation in advanced nursing practice roles. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS or Nursing Education MS or Nursing (Patient Safety and Health Care Quality) MS |
| NUR | 502 | Advanced Health Assessment, Pathophysiology and Pharmacotherapeutics for Health Promotion I | Uses a lifespan developmental framework to present, integrate and interrelate advanced concepts, practices and principles applied to the biological, cognitive and psychosocial domains of health assessment, pathophysiology, and pharmacotherapeutics for health promotion appropriate to master's level nursing practice and roles. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to a Nursing MS program |
| NUR | 503 | Advanced Health Assessment, Pathophysiology and Pharmacotherapeutics for Health Promotion II | Uses an at-risk population framework to present, integrate and interrelate advanced concepts, practices and principles applied to the biological, cognitive and psychosocial domains of pathophysiology, pharmacotherapeutics and health assessment for health promotion among vulnerable populations appropriate to master's level nursing practice and roles. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 502 with B- or higher |
| NUR | 509 | Clinical Prevention and Population Health Practicum | Preceptored practicum appropriate to master's level nursing practice and roles within the context of team-based interprofessional clinical prevention and population healthcare and/or services. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 2 | | Prerequisite(s) with B- or better: DNP 604; 605; 608; 633 |
| NUR | 510 | Foundations of Care Coordination Practice | Focuses on the theoretical concepts of care coordination and case management, including current models, intervention components, evaluation methods and financing. Provides the foundation for understanding care coordination and the roles nurses have played in the evolution and implementation of the care coordination models. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS degree or certificate program |
| NUR | 511 | Concepts of Care Coordination and the Nurse's Role | Focuses on how nurses make care coordination visible in nursing practice and make a difference in cost-efficiency, quality and safety outcomes. Prepares nurses to advance care coordination at the unit, organizational or systems levels. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre- or corequisite(s): NUR 510 with B- or better if completed |
| NUR | 512 | Improving Quality and Safety Outcomes Through Effective Care Coordination | Focuses on the nurse's role in care coordination, and how care coordination programs are used to provide cost-effective and patient-centered care, improve quality and safety outcomes for patients and families, and use health information technology to advance the goals of care coordination. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): admission to Nursing (Care Coordination) MS degree or certificate program |
| NUR | 513 | Interprofessional Collaborative Practice and Transforming Health Care Policy | Examines the nurse's role in communicating, collaborating and leading interprofessional teams to advance innovative care coordination models. Prepares nurses to influencing health policy through care coordination research and leadership. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s) with B- or better: NUR 510; 511 |

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| NUR | 519 | Role-Focused Practicum: Care Coordination | This mentored practicum provides the learner with opportunities to apply care coordination (CC) concepts and principles in a practice environment at the unit, organization or systems levels. Tailored to the prior experiences and level of the learner and may include working in intra- and interprofessional teams to address care coordination initiatives at the unit, organizational or systems levels. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 510 with B- or better; NUR 511 with B- or better; NUR 512 with B- or better; NUR 513 with B- or better |
| NUR | 520 | Patient Safety and Health Care Quality Principles, Assessment and Methods | Focuses on the application of core principles of patient safety and health care quality to patients. Explores current and historical factors that contribute to quality health care outcomes. Examines the influence of financial, legal and regulatory factors on patient safety and health care quality. Applies various theories, concepts and tools to promote patient safety and health care quality. Describes the principles of just culture and the relationship to analyzing errors. Discusses the nurse's role in advancing patient safety and health care quality. Infuses the Quality Safety Education in Nursing (QSEN) competencies into course activities. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing (Patient Safety and Health Care Quality) MS major |
| NUR | 521 | Health Care Evidence, Informatics and Analysis | Focuses on applying information technology and research methodology to safety and quality initiatives. Students learn the role of technology related to select human factors engineering concepts and related clinical application (e.g., medication administration, clinical decision making). Focuses on determination of outcome measures related to evidence-based practice (EBP) and quality improvement (QI). Discusses survey methods including construction, data collection methods, and data analysis. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better |
| NUR | 522 | Designing Systems for Patient Safety and Health Care Quality | Focuses on the design, implementation, evaluation and sustainability of patient safety and health care quality initiatives. Uses innovation and change theories, as well as high reliability and just culture principles, to support data collection, analysis and reporting within complex health care systems. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better; NUR 521 with B- or better |
| NUR | 523 | Interprofessional Collaboration for Improving Patient Safety and Health Care Quality Outcomes | Focuses on developing skills and strategies for interprofessional collaboration, team leadership, communication, and project management to improve patient safety and health care quality outcomes in an interprofessional health-related setting. Theory and evidence-based strategy for team building, maintenance and conflict resolution for improved team-based practice and performance. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better |
| NUR | 529 | Role-Focused Practicum: Patient Safety and Health Care Quality | Mentored practicum provides opportunities to apply patient safety and health care quality (PSHQ) concepts and principles in a practice environment at the unit, organization or systems levels. Tailored to the prior experiences and level of the learner. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 520 with B- or better; NUR 521 with B- or better; NUR 522 with B- or better; NUR 523 with B- or better |
| NUR | 530 | Foundational Concepts for Nursing Informatics | Focuses on the concepts of nursing informatics. Analyzes the scope and standards of practice; ethical and privacy principles; relationships amongst biomedical, health and nursing informatics; and models, concepts and theories that support nursing informatics practice. Appraises accreditation and legal and regulatory requirements for health and nursing informatics. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 531 | Advanced Concepts in Nursing Informatics | Focuses on advanced concepts in nursing and health informatics practice. Analyzes the health informatics metastructures, relationships between nursing and multidisciplinary standardized terminologies, trends in nursing and health informatics, ethical, privacy and legal issues, and the emerging role for the nurse informaticist. | N | LEC | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 530 |
| NUR | 539 | Role-Focused Practicum: Nursing Informatics | Learners complete 135 hours of mentored clinical practice during this practicum applying nursing informatics (NI) concepts and principles in a practice environment at the unit, organization or systems levels. Tailored to the prior experiences and level of the learner and may include working in intra- and interprofessional teams to address informatics initiatives at the unit, organizational or systems levels. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 530 with B- or better; NUR 531 with B- or better |
| NUR | 579 | Role-Focused Practicum: Nurse Educator | Mentored teaching practicum includes application of teaching/learning principles in a specialized area of interest. Tailored to the teaching experience and level of the student. May include classroom, online or clinical teaching, attendance at approved conferences, relevant meetings or other activities that provide opportunity for the learner to gain expertise in the selected area of interest. | N | PRA | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 670; NUR 671; Credit is allowed for only NUR 579 or NUR 580 (Teaching Practicum) |
| NUR | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing student |

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| NUR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |
| NUR | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Pre-requisites: Nursing Graduate student |
| NUR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-4 | | Pre-requisites: Nursing Graduate student |
| NUR | 601 | Scientific Role Development I: Engaging and Committing | First in a series that focuses on the development of a scientific role identity in nursing and health care innovation, including the areas of education, policy and research. Analyzes current trends in the development of innovative scientists and leadership characteristics needed for future roles. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Health Care Innovation PhD student |
| NUR | 602 | State of the Science in Nursing and Healthcare Innovation | Focuses on research synthesis and critiques of the scientific literature as a basis for knowledge generation related to a focal area of research interest. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing & Healthcare Innovation PhD student; Corequisite(s): NUR 605 |
| NUR | 603 | Social and Contextual Issues in Nursing and Healthcare | Analyzes nursing practice and the healthcare system for an identified population using social-ecological approaches. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 604 | Philosophy of Science Perspectives in Nursing and Healthcare Innovation | Analyzes the history and philosophy of science as a basis for knowledge and academic scholarship in nursing and healthcare innovation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 605 | Theory Analysis | Examines theoretical perspectives and approaches guiding research in nursing and healthcare innovation across the lifespan. Includes the historical evaluation, social contextual factors, implicit assumptions, and bias that influence nursing and healthcare innovation knowledge generation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 606 | Scientific Role Development II: Validating and Demonstrating | Second in a series that focuses on the development of a scientific role identity in nursing and health care innovation, including the areas of education, policy and research. Posits the knowledge, skills and resources needed to expand one's career as an educator and scientist in a health-related leadership role in the context of a future health care environment. Explores strategies for progressive and creative approaches in preparing leaders for innovative change in education, research and health care policy affecting healthcare delivery. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): Nursing and Health Care Innovation PhD student |
| NUR | 607 | Scientific Role Development III: Bridging | Focuses on the development of a scientific role identity in nursing and health care innovation, including the areas of education, policy and research. Students study the career trajectories of key leaders in nursing and health care innovation as a basis for development of their own personal plans for success, including research trajectories and marketing. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 1 | | Prerequisite(s): NUR 606 |
| NUR | 608 | Qualitative Research Design and Methods | Explores and critiques selected qualitative research approaches. Includes fieldwork exercises as an integral part of course expectations. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 609 | Quantitative Research Design and Methods | Examines multiple research approaches in clinical and health policy research from a quantitative perspective. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 612 | Advanced Analysis of Variance: Design and Analysis of Experiment | Introduces theory, methods, and practice of analysis of variance. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 613 | Principles of Regression and Correlation | Introduces theory, methods, and practice of regression analysis. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 614 | Design and Implementation of Theory-Based Interventions | Focuses on the knowledge related to advanced methods for intervention research. Examines methodological, ethical, and practical issues in the design and implementation of theory-based intervention studies. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 615 | Qualitative Data Management Seminar | Qualitative research methods applied to thesis, dissertation or qualitative research reports, focusing on data reduction, analysis, interpretation, credibility, ethics and dissemination. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): COE 503 or CRJ 613 or EDP 503 or NUR 608 or PAF 610 |

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| NUR | 616 | Community-Based Participatory Research | Overview of Community-Based Participatory Research (CBPR). Familiarizes participants with key historical underpinnings of CBPR, principles of CBPR practice, as well as methodological CBPR considerations in building community partnerships, issue analysis, research planning, data gathering and data sharing. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 0 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only NUR 616 or NUR 691 (Community-Based Research) |
| NUR | 617 | Foundational Concepts in Science and Statistics | Provides basic skills necessary for health-related research specifically geared toward (1) understanding concepts of widely used statistical methods with examples from health care; (2) ethical knowledge of human subjects research; and (3) processes of research including research design, interpretation and presentation of results and critiquing research articles. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): COE 502 or EDP 502 or EXW 501; Credit is allowed for only NUR 617 or NUR 691 (Foundational Concepts in Science and Statistics) |
| NUR | 618 | Advancing Research-Based Health Policy Through Leadership and Innovation Science | Integrative synthesis course in which students apply values and knowledge from previous PhD core courses in philosophy of science, theory analysis, state of the science, quantitative and qualitative methods, and the art and science of teaching. Examines the role of scholars and scientists in health policy reform. Using tools from leadership and innovation science, advances strategies to accelerate the use of interprofessional research in policy decisions and advances the national agenda for improving health and the quality and affordability of health care. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 602, 603, 604, 605, and 609 |
| NUR | 628 | Research, Theory and Principles for Palliative Care in the Older Adult | Focuses on theory and research underlying end of life and palliative care for the older adult utilizing current practice guidelines and research. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): PhD Nursing and Healthcare Innovation major |
| NUR | 629 | Research for Geriatric Practice | Gaining knowledge and skills in critical appraisal and synthesis of evidence to guide best practice in gerontology. | N | LEC | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only DNP 629 or NUR 629 |
| NUR | 630 | Mechanisms of Disparities | Analyzes and applies the complex issues underpinning culture and health disparities related to a specific health outcome to research with a selected cultural group. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Mechanisms of Culture), 598 (Mechanisms of Disparities) or 630 |
| NUR | 631 | Leveraging Culture in Intervention Development | Analyzes the complex issues underpinning the development of evidence-based interventions among various cultural groups. Also analyzes methods of leveraging culture to optimize the development, delivery, effect and evaluation of health interventions for various cultural groups. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: NUR 630 (or NUR 598 Mechanisms of Disparities); Nursing and Healthcare Innovation PhD student; Credit is allowed for only NUR 598 (Leveraging Culture in Intervention Development) or 631 |
| NUR | 640 | Integrative Theories of Innovation in Healthcare | Analyzes cross-disciplinary theories of innovation for improving health and quality of healthcare. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: NUR 605; Credit is allowed for only NUR 691 (Integrative Theories of Innov) or NUR 640 |
| NUR | 641 | Theories of Emergent Leadership in Healthcare Innovation | Analyzes cross-disciplinary theories of leadership. Emphasizes leadership frameworks that describe, explain and predict the relationships among leadership and healthcare innovation and outcomes. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): NUR 640. Credit is allowed for only NUR 641 or 691 (Theories of Emergent Leadership in Healthcare Innovation) |
| NUR | 650 | Human Lactation in the Post-Modern World | In-depth exploration of the complex and multifaceted social, cultural and environmental contexts that affect the public health goal of improving successful breastfeeding during the first years of life. | N | SEM | N | GNA | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only NUR 650 or 691 (Human Lactation in the Post Modern World) |
| NUR | 670 | Curriculum Development in Academic and Practice Settings | Includes analyses of historical, philosophical, societal, environmental, cultural, technological, and educational factors of curriculum development in academic and practice settings. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Prerequisite(s): Nursing (Nursing Education) MS or Graduate Certificate in Nursing Education; Pre- or corequisite(s): NUR 671 with B or better |
| NUR | 671 | Teaching in Academic and Practice Settings | Analyzes theories, issues, research related to teaching in nursing and educational leadership. Focuses on the process of teaching and learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program. |
| NUR | 672 | Design and Delivery of Mediated Instruction | Addresses instructional design issues, theory, and practices related to online and electronically mediated learning. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 673 | Producing and Evaluating Programs for Academic and Practice Settings | Critical examination of standards, regulatory environment, administrative systems, leadership requirements, technological infrastructure, human factors, future trends regarding mediated education planning, production, and evaluation. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | Pre-requisites: Nursing Graduate student or Certificate program; NUR 670 |
| NUR | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 688 | Management of Complex Diseases and Syndromes in Geriatric Population | Focuses on diagnosis and management of complex diseases and syndromes in the geriatric population. | N | SEM | N | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 3 | | |
| NUR | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | IND | N | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | Pre-requisites: Nursing Graduate student |

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| NUR | 692 | Research | | N | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-12 | | |
| NUR | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| NUR | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Nursing & Health Innovation | College of Nursing and Health Innovation | 1-15 | | |
| OBS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 501 | Obesity Prevention and Management: An Introduction | Helps students understand the complex etiology of obesity and enhances their ability to work with individuals and populations at risk of obesity to develop effective behavior change-based strategies for prevention and management of the condition across the lifespan. | N | LEC | N | GNA | College of Health Solutions | School of Nutrition and Health Promotion | 3 | | Prerequisite(s): Obesity Prevention and Management MS major; Credit is allowed for only OBS 501 or OBS 598 (Obesity Prevention and Management) |
| OBS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | |
| OBS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Health Solutions | School of Nutrition and Health Promotion | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | College of Health Solutions | School of Nutrition and Health Promotion | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OBS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Health Solutions | School of Nutrition and Health Promotion | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OGL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| OGL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 200 | Introduction to Organizational Leadership | Presents a broad survey of leadership theory and research as currently practiced in formal organizations. Includes examination of leadership models, power and influence, team leadership, cross-cultural leadership, strategic styles of interaction, ethics, leadership skill development, decision-making techniques and effective goal implementation. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| OGL | 220 | Behavioral Dynamics in Organizations | Explores the different theories, strategies and skills that managers and subordinates need to develop to improve interpersonal relations. Primarily emphasizes skill areas in leadership, motivation, communication, group dynamics, organizational development, conflict resolution, political strategy, cross-cultural relations, ethical behavior, stress management and time management. Develops effective strategies for becoming effective managers, subordinates, peers and students. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| OGL | 240 | Introduction to Project Management | Offers insights into each step of the project management process through an examination of various theoretical approaches. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| OGL | 260 | Resource Allocation in Organizations | Introduces the decision-making framework of resource allocation within the broader context of basic business finance. Students learn that resource allocation decisions are regularly guided by fundamental principles in finance. Primarily focuses on business resources, resource management and allocation, accounting statements, profit and loss drivers, cash and profit statements, balance sheets, budgets and forecasts, management accounts and capital investment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; MAT 117 (or any course with General Studies MA designation) |
| OGL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 300 | Theory and Practice of Leadership | Presents an in-depth study of leadership theory and its practical application in formal organizations. Includes examination of the trait approach, situational approach, contingency theory, path-goal theory, leader-member exchange theory, transformational leadership, psychodynamic approach, and women and leadership. Emphasizes application of these theories in real-world case studies. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): OGL 200; minimum 56 hours |
| OGL | 320 | Foundations of Project Management | Covers project management terminology, tools, best practices, theoretical approaches, the phases of project management and how they are applied developing a project plan and schedule, and other competencies needed to effectively manage projects. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours; Credit is allowed for only OGL 240 or OGL 320 |
| OGL | 321 | Project Leadership, Strategy and Scope | Explores how executive management is responsible for conceiving, designing, implementing and managing the organization's overall objectives, culture, environment and processes as part of the project management process. Within this context, primarily focuses on understanding project management, aligning project management with the organization, project management oversight, projects as capital investments, globalization and resources optimization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): OGL 240 or OGL 320; minimum 56 hours |
| OGL | 322 | Project Time Management | Explores project scheduling and time management within the broader context of the planning effort. Students learn how important the determination of the timing and sequence of project activities is to the planning process--and ultimate project success. Primarily focuses on understanding bar charts, basic networks, the critical path network, precedence networks, resource allocation, schedule updating, schedule compression, scheduling and schedule risk management. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 earned hours |
| OGL | 323 | Project Cost Management | Concepts and complex processes of effective project cost management. Primarily focuses on project needs assessment, cost estimation, project cost control, project budgeting, cash flow management, financial management, value management, configuration management and supply chain management. Students also learn to appreciate the importance of integrating cost and value management processes. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 324 | Resources in Project Management | Major elements of project resource management as well as the broader context of this critical planning function. Students learn that sound resource management is an important part of developing a sustainable competitive advantage in the emerging global marketplace. Primarily focuses on operations and productivity, resources in project management, product design, process strategy, layout strategy, human resources and job design, supply chain, inventory management and scheduling. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |

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| OGL | 326 | Project Procurement Management | Concepts and processes of procurement management. Primarily focuses on sourcing management, supplier selection, contracts and legal requirements, risk management, negotiation, project management, quality, supplier management and financial decisions. Effective procurement requires the use of good business practices capable of maximizing value to the organization through the acquisition of goods and services. Students learn that procurement professionals control the entire sourcing and acquisition process. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 240; Minimum 55 hours |
| OGL | 350 | Diversity and Organizations | Critical interdisciplinary analysis of individual, cultural, and organizational diversity. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L & C | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours. Credit is allowed for only BIS 350 or OGL 350 |
| OGL | 355 | Leading Organizational Innovation and Change | Process and theory of strategic management with primary emphasis on situation analysis, strategy formulation, strategy implementation and strategy evaluation. Covers the strategic management context, external analysis, internal analysis, functional and competitive strategies, international strategies, strategic entrepreneurship and nonprofit strategy. Students understand the process of analyzing situations, developing appropriate strategies, putting those strategies into action, and evaluating and changing those strategies as needed. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 56 hours |
| OGL | 360 | Assessment of Leadership Effectiveness | Empirical analysis of leadership, a conceptual model of effective leadership, and a practical guide for developing the competencies and attributes most likely to produce effective leaders. Primarily focuses on leadership competencies, organizational fit, leadership strengths, fatal flaws, leadership teams, leadership development, improvement measurement and leadership follow through. Students learn to distinguish between leadership success and leadership effectiveness. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): MAT 117 (or any course with General Studies MA designation); OGL 200; minimum 56 hours |
| OGL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 421 | Project Risk Management | Philosophy, principles, practices and techniques for managing risk in projects. Covers risk identification, qualitative risk management, risk treatment, monitoring and review, project processes, risk allocation, environmental risk and quantification of project risk. Students learn that risk management assists project managers in setting priorities, allocating resources and implementing actions and processes that reduce the risk of the project not achieving its objectives. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 422 | Project Quality Management | Process and theory of total quality management with primary emphasis on the total quality approach, ethics and corporate responsibility, strategic alliances, quality culture, employee empowerment, leadership and change, team building, effective communication, and tools and techniques. Students understand how continual improvement of people, processes, products/services, and environments can enhance the process and outcomes of project management. Students have the opportunity to develop practical total quality management skills as they apply theory and practice to real-world cases. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: OGL 321; Minimum 55 hours |
| OGL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| OGL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | |
| OGL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| OGL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| OGL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | Prerequisite(s): Organizational Leadership major; minimum 90 hours; BIS 343 and 345; ENG 102 or 105 or 108 with C or better; OGL 200, 220, 240, 260, 300, 321, and 350 |
| OGL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |

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| OMT | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 343 | Occupational Safety and Ergonomics | Health and safety movement, accident theories and effects, OSHA standards and liability, safeguarding, hazards, workers' compensation, ergonomics, and safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | |
| OMT | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| OMT | 402 | Legal Issues for Technologists | American legal system and impact on technology management issues: contracts, torts, intellectual property, white collar crime, antitrust, environmental, and employment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |
| OMT | 405 | Forecasting and Evolution of Technology | History and evolutionary nature of selected technologies, issues in the management of emerging technologies, and methods of technological forecasting. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite: Minimum Junior standing |
| OMT | 430 | Ethical Issues in Technology | Topics in social responsibility for industrial technology and engineering. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student |
| OMT | 440 | Introduction to International Business | International business principles and operations, including partnerships, trade agreements, currency issues, international sales, and cultural differences between countries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | G | Prerequisite(s): Prerequisite(s): Fulton Polytechnic School undergraduate or graduate student; MGT 301, TMC 330 (TMC 346) |
| OMT | 445 | Industrial Internship | Work experience assignment in industry commensurate with student's program. Specialized instruction by industry with university supervision. Pass/fail. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-10 | | Prerequisites: Fulton Polytechnic School undergraduate student; Minimum 2.25 GPA; minimum Junior standing |
| OMT | 452 | Industrial Human Resource Management | Concepts and practices of human resource management in a global industrial environment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre requisite(s): Fulton Polytechnic School student |
| OMT | 480 | Organizational Effectiveness | Human aspects of supervisory behavior in the industrial setting and how they influence efficiency, morale, and organizational practices. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): MGT 301 or TMC 330 (TMC 346) |
| OMT | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Pre-requisites: Minimum Junior standing; Minimum 2.25 GPA |
| OMT | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| OMT | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 502 | Financial Management | Examines corporate financial and managerial accounting systems, budgeting, and financial policy, using microcomputers to analyze, forecast, and report information. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 503 | Marketing Management | Modern methods and industrial case studies of planning, pricing, promoting, and distributing goods and services in the global marketplace. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 504 | Law and Ethics for Technical Professionals | Analyzes legal and ethical framework for making managerial decisions in the corporate environment of engineering- and technology-related industries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 520 | Strategic Management of Technology | Analyzes entrepreneurial dynamics and technology development, methods of research and development management, new technology implementation, and start-up organization. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 540 | International Management | Practices and procedures for effective management of multinational business organizations, including partnerships, joint ownerships, and global subsidiaries. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 548 | Statistical Methods for Research | Multivariate statistical techniques to analyze research data. Uses statistical software and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 549 | Research Techniques and Applications | Selection of research problems, analysis of literature, individual investigations, preparing reports, and proposal writing. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| OMT | 560 | Managerial Decision Making | Analyzes common decision-making biases and techniques to overcome them. Uses both subjective quantitative decision tools and computerized decision aids. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 570 | Advanced Project Management | Planning, organizing, coordinating, and controlling staff and project groups to accomplish the project objective. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only OMT 570 or TMC 470 |
| OMT | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| OMT | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OMT | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | OP4 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| OPM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| OPM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| OPM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| PAF | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 200 | Public Service and Policy in the 21st Century | Provides a broad introduction to the field of public service and leadership. Topics include an overview of management, policy, urban studies, and leadership in the public sector. Covers the history and development of the public sector, as well as how it serves contemporary society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 201 | Economics and Public Policy | Introduces the terminology and methods of analysis in microeconomics. In particular, examines the behavior of individual consumers and firms, with a focus on market failures and the role of government policy in correcting those failures. Applies microeconomic principles to the distribution of income, policies for eliminating poverty and discrimination, the problems of environmental pollution, and the impact of different market structures on economic activity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | |
| PAF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 300 | Public Management and Administration | Examines the context and role of the public manager and the development of the field of public administration. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 301 | Applied Statistics | Focuses on statistical techniques used in social science research. Applies concepts such as measures of central tendency and dispersion as well as statistical techniques, including the following: one-sample z and t tests, two-sample t tests, chi-square, and correlation. Goals include helping students understand the mathematical and statistical concepts presented and assisting them in using these concepts in everyday life and in the study of social sciences. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | CS | Pre-requisites: MAT 142 or higher |
| PAF | 302 | Public Service Research Methods | The philosophy, scope, and methods of public sector research. Examines quantitative and qualitative research methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 301 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PAF | 311 | Leadership and Change | The leader's role in bringing about significant organizational and societal change with special attention to group and organizational behavior dynamics, establishing a vision, mobilizing and empowering individuals and groups, and assessing outcomes of the change process in a variety of settings. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours |
| PAF | 340 | Contemporary Policy Challenges | Develops conceptual, critical, and practical understanding of public policy, the policy process, and policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Minimum 30 hours |
| PAF | 350 | Introduction to Science & Technology Policy | Explores the variety of ways in which governments make policies, how the policies shape the development of science and technology and their applications, and how policy may be shaped to create better futures. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 30 hours |
| PAF | 360 | Introduction to Emergency Management | Emergency management theories. Comprehensive emergency management. Mitigation, preparedness, response, and recovery. Post-disasters and policy formation. Current FEMA all-hazards approach. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 363 | Computer Applications in Emergency Management | Explores specific computer programs that are currently in use for contingency planning, tracking chemical inventories, and response resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: MAT 142 |
| PAF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 400 | Senior Capstone Project | Teaches students to solve problems related to the public sector by applying theory, knowledge, and methods from previous courses to a hands-on project in the community. Seminars include guest speakers and discussions on professional development. Students work as individuals and as a team to prepare research papers and a professional report that is presented to the community. | N | LEC | Y | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 200, 201, 301 (or 401), 302, 311 (or 411), 340, and 460 with C or better |
| PAF | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: Minimum 30 hours; Credit is allowed for only PAF 410 or URB 410 |
| PAF | 420 | Public Leadership | Examines key concepts, models, and strategies for leading public and nonprofit organizations, emphasizing self-knowledge, skills, and abilities for effective leadership. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 421 | Leadership Capstone | Builds upon leadership courses in the Leadership and Ethics certificate program by applying concepts and examples from the readings as well as individual experiences. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 311 and 410; Credit is allowed for only PAF 421 or 494 (Leadership Capstone) |
| PAF | 424 | Comprehensive Emergency Management | Addresses theory and management techniques for emergency preparedness, including mitigation, preparedness, response, and recovery. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 425 | National Incident Management System (NIMS) | Covers concepts, terminology, players, compliance requirements, including doctrine of National Incident Management System per HSPD-5. Discussion of National Response Plan. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 460 | Public Service Ethics | Role, values, and issues of public management in democratic governance, citizen participation, power structures, and professional codes of conduct. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 461 | Homeland Security | In-depth analysis of policies, procedures, and organizational structure for effective homeland security program. Covers all hazard/all risk philosophy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only PAF 461 or 561 |
| PAF | 468 | Simulation and Exercising | Requirements, planning, conduct, and critique of exercises related to emergency planning. Emphasizes realism using moulage and props. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): minimum 45 hours |
| PAF | 469 | Terrorism Defense | Explores the background and evolution of terrorism. Presents specific tactics for preparation for and response to acts of terrorism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ABS 598 (Terrorism Defense) or PAF 469 |
| PAF | 470 | Topics in Public Economics and Financial Management | Provides an analysis of public economic practices and problems in a federal system. Presents detailed descriptions, where appropriate, of significant institutions and applies modern economic theory to the ways that these institutions finance and deliver services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: ECN 212 or PAF 201 with C or better |
| PAF | 471 | Public Policy Analysis | Provides further study in the concepts, models, and operational methods used in public policy decisions and analysis. Enables students to develop higher skills needed for defining policy issues, identifying alternative solutions, and predicting the potential impact of policy alternatives. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 301 and 340 with C or better |
| PAF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | | Prerequisite(s): Barrett Honors student |
| PAF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| PAF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| PAF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-3 | | |
| PAF | 501 | Public Service Research I | Philosophy, scope, and methods; public service research design, values, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Must have earned B or better or currently enrolled in PAF 401, POS 401, PSY 230 QBA 221, or SOC 390 AND course must be completed within 4 previous terms |
| PAF | 502 | Public Service Research II | Quantitative techniques including multivariate analysis, data analysis, decision making, and computer applications in public affairs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |
| PAF | 503 | Public Affairs | Development and context of American public administration and policy, role of administration in governance, and values and ethics in administration. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 504 | Microeconomics of Public Policy I | Provides key principles of microeconomics. Places particular emphasis on developing the analytic tools of economic reasoning and using these tools to examine policy interventions of interest to public managers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 505 | Public Policy Analysis | Institutional and formal analysis of policy processes, decision making, and problem solving; values, ethics, and the uses of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 504 with C or better |
| PAF | 506 | Public Budgeting and Finance | Legal, social, economic, political, institutional, and ethical foundations of governmental finance, budgets, and budgeting. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better |
| PAF | 507 | Public Human Resource Management | Personnel systems, behavior and management of people in public organizations, collective behavior, unionism, conflict management, motivation, productivity, and ethics. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 508 | Organization Behavior | Theory and application in the management of organizational behavior with emphasis on leadership and the public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 509 | Public Affairs Capstone | Capstone application of core course knowledge, skills, and abilities required for public service. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PAF 501, 502, 503, 504, 505, 506, 507 and 508 with C or better |
| PAF | 520 | Public Management | Management process in government and public agencies, with emphasis on the executive leadership within the public sector. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 523 | The City and County Manager | Manager's role and resources in the differing forms of administrative, legislative, and community sectors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 525 | Public Entrepreneurship | Explores entrepreneurship in the public sector from various angles, including small and large communities and nonprofits. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 529 | Organization Change and Development | Explores the nature and management of change and development as a tool to achieve organizational goals; effecting planned change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 530 | Management of Urban Government | Administrative practices and behavior within the urban political administrative environment. Functional areas such as citizen participation, urban planning, urban transportation, and the conflicts between urban politics and administrative efficiency. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 531 | Community Conflict Resolution | Interdisciplinary approach to understanding the dynamics of community conflict. Strategic considerations in policy design and advocacy; potential reaction to conflict. Relevant models and research findings generated by both case studies and comparative methods. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 534 | Urban Services Infrastructure | Provides an overview of the network of services being provided in the urban environment by a variety of governmental and nongovernmental agencies. Discusses coordination, cooperation and overlap of services by local, special district, county, regional and state levels, alternate delivery methods including nonprofits, and the evolving relationship of these services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 540 | Adv Policy Analysis | Emphasizes the structure of policy problems, forecasting policy alternatives, optimizing resources, and reducing uncertainty in policy making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 505 with C or better |
| PAF | 541 | Program Evaluation | Various methodologies available for the evaluation of public policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 501 with C or better |

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| PAF | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy—especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| PAF | 546 | Environmental Policy and Management | Analyzes environmental policy and planning issues and principles related to the analysis and management of natural and urban/regional resources. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 547 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| PAF | 548 | Women/Politics/Public Policy | Explores how political philosophy, politics, and public policy affect and are affected by women. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 549 | Diversity Issues and Public Policy | Examines public policy issues concerning or affecting women, black, Latino, Asian, and American Indian communities, as well as those groups' impact on the policy process. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 550 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |
| PAF | 552 | Integrated Emergency Management | Theory and practice of comprehensive emergency management. Explores scope and function of Department of Homeland Security. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 555 | Information Technology in Emergency Management | Provides theory and application of computer-based programs in emergency management and the use of various emergency modeling programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 560 | Community Resilience | Examines community resilience from a systems perspective, embracing governments, private, nonprofit and civic roles. Presents research, case studies, and strategies for policy planning and implementation. Provides an understanding of how community members respond to the need to prepare for, endure and recover from disasters and the ability to utilize multiple communication methods to help community members before, during and after these emergencies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 561 | Interoperability for Emergency Managers | Enables understanding of the multiple technologies and skills utilized by emergency managers to enhance successful coordination and communication between all levels of emergency managers and responders during emergency mitigation, prevention, preparedness, response and recovery operations. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 554 |
| PAF | 564 | Political Economy | Classical and contemporary literature and historical development of governmental and economic arrangements, with special emphasis on the role of the state. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 565 | Theories and Practices of Democracy | Critically explores the wide range of ideas, issues, challenges, and promises related to democracy in theory and practice. Intended for all students interested in democratic leadership, public service, civic engagement, and participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PAF | 566 | Participatory Governance & Civic Engagement | Examines classic and current theoretical debates on participatory governance and civic engagement, discusses theoretical and practical implications, and analyzes different models of participatory governance. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PAF | 570 | Microeconomics of Public Policy II | Provides the policy tools to solve economic problems such as market concentrations, market failures and externalities, and asymmetric information. Increasingly, government interventions are moving away from a command-and-control-style of direct provision of goods and services and toward a large menu of indirect approaches implemented through a complex system of third-party actors. Government intervention in private markets now entails loans and loan guarantees, grants-in-aid, contracts, vouchers, social and economic regulation, and many other policy tools. Each of these instruments involves vastly different behavioral distortions, policy technologies, political considerations and technical sophistication. Analyzes the economics of four policy interventions: grants, tax expenditures, social regulation and vouchers. Provides an overview of each tool (including its key design features) and combines economic theory with background information on how public policies actually operate. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better |
| PAF | 571 | Geographic Information Systems (GIS) and Analysis | Provides foundational information related to application of GIS technology to meet various needs within governmental operations, administration, and public policy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 573 | Applied Econometrics | Applied treatment of the most important modern econometric methods used to evaluate public policies. Help students become savvy consumers of econometric methodology and develops the methodological skills necessary for implementing quantitative evaluations of public policies. Accordingly, course stresses critical thinking and creativity. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: PAF 502 with C or better |
| PAF | 574 | Diversity, Ethics, and Leading Public Change | Focuses on leadership, ethics, and benefits and tensions of the multicultural city to develop leadership and multicultural competence. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 579 | Public Policy Capstone | Integrative, client-based project course. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | L | |
| PAF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | Pre-requisite: Doctoral student |
| PAF | 601 | Seminar: Pol Analysis & Eval | Normative and conceptual issues of policy formulation, implementation, and evaluation; methods of policy analysis and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| PAF | 602 | Seminar: Foundations of Public Administration | Philosophy of science (including conduct of inquiry--epistemological and ontological foundations), historical development, and theoretical foundations of the field. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Doctoral PAF student |
| PAF | 603 | Advanced Economics for Public Administration and Public Policy | Theory of utility and demand, theory of the producer, organization, operation of product and factor markets, market equilibrium, regulation, risk and uncertainty, general equilibrium and welfare policy, market failure, public goods and taxation, and game theory. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Prerequisite(s): PAF 504 with C or better; doctoral major |
| PAF | 604 | Foundations of Public Administration II | Philosophy of science (including research design issues and alternative approaches) and contemporary public administration, including political, social, technological, and economic institutions involved in governance, exposure to research being conducted within department. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student; PAF 602 |

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| PAF | 610 | Advanced Qualitative Methods for Public Affairs Research | Explores a number of qualitative research approaches and methods, including ethnography, ethnomethodology, participant observation, interviews, focus groups, content analysis, discourse analysis, and some comparative/historical methods. Also exploreS the important theoretical and ethical issues that bear on these approaches. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: PhD student |
| PAF | 620 | Public Administration Professional Development Workshop | Prepares doctoral students to become productive and effective public administration scholars, teachers, and researchers. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisites: Doctoral PAF student |
| PAF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| PAF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PAF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1 | | |
| PAF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-15 | | |
| PBH | 100 | Introduction to Public Health | Introduces public health in the United States. Familiarize students with the broad discipline of public health and how it influences community and individual health status. Discusses the role of various agencies in public health, methods of measurement and evaluation, major public health issues in the United States, and factors that contribute to individual and community health. Solidifies concepts through the use of in-class discussion, group work and individual analysis. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Credit is allowed for only HCD 101 or PBH 100 |
| PBH | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 300 | Biostatistics | Biostatistics and its use in health and health services research. Familiarize students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces SPSS software to analyze large data sets. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | CS | Prerequisite(s): completion of General Studies MA requirement with C or better; minimum 45 hours. Credit is allowed for only HCD 300 or PBH 300 |
| PBH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PBH | 422 | Health Disparities and Access to Health | Racial and ethnic health disparities in the United States. Explores disparities in healthcare seen at the provider and system level and their effects on health in the community. Also considers the historical context of racial and ethnic health disparities and the demographic and conceptual issues surrounding health disparities research. Reflects on the effects of behavior, socioeconomic status and group-specific disparities on community health status. | N | LEC | N | GNA | College of Health Solutions | College of Health Solutions | 3 | | Prerequisite(s): HCD 101 (or PBH 100) or BS Medical Studies major. Credit is allowed for only HCD 422 or PBH 422 |
| PBH | 444 | Public Health Field Experience | Provides opportunity to gain experience working in community and public health settings. Course meetings provide guidance during the field experience and an opportunity for students to share their projects. | N | RSC | N | GNA | College of Health Solutions | College of Health Solutions | 4 | | Prerequisite(s): EXW 450; HCD 101 or PBH 100 |
| PBH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | College of Health Solutions | 1-12 | | |
| PBH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | College of Health Solutions | 1-4 | | |
| PGM | 100 | PGA/PGM Introduction | Introduces the golf professional training program. Career enhancement, rules of golf, tournament operations, and playing professional development programs. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 110 | Player Development I | Introductory instruction on golf game improvement to assist PGM students in preparation for Players Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PGM | 111 | Player Development II | Instruction to assist PGM students in preparation for Players Ability Test with emphasis on full swing mechanics and practice plan development. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | Pre-requisites: Pre-Agribus (Prof Golf Mngt) or an Agribusiness (Prof Golf Mngt) student |
| PGM | 112 | Player Development III | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 113 | Player Development IV | Emphasizes classroom and hands-on applications of full swing analysis and short game strategies. Special focus on golf course management. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 114 | Player Development V | Introductory instruction on golf game improvement to assist PGM students in preparation for Player Ability Test. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 120 | Golf for Business and Life | Introduces nongolfing students to the game of golf. For beginners. | N | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 130 | PGA/PGM Level 1 | Focuses on golf professional training program and the completion of the PGA Level One experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 150 | Teaching Golf I | Introduces golf instruction. Focus on fundamentals of golf swing and teaching techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 166 | Turf Equipment Management | Introduces turf equipment used on golf courses. Instruction in maintenance, adjustment, and safety issues. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 200 | PGA/PGM Level 2 | Focuses on golf professional training program and the completion of the PGA Level Two experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 250 | Teaching Golf II | Communicating with student golfers, swing evaluation, key factors club fitting, developing a successful teaching practice. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 300 | PGA/PGM Level 3 | Business planning and operations, business communications related to business of golf. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 350 | Teaching Golf III | Teaching swing concepts. Developing a teaching philosophy, analyzing flawed swing mechanics through video and swing analysis software. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 367 | Landscape Plants and Design | Identification, design, and use of plants in urban landscapes. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 4 | | Prerequisite(s): minimum 45 hours |
| PGM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PGM | 400 | GPTP IV | Food and beverage control, supervision and delegation of golf facilities. Completion of the PGA Level Three experience kit. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1 | | |
| PGM | 463 | Golf and Sports Turf Management | Selection, establishment, and maintenance of turf grasses bred specifically for golf and sports facilities. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 3 | | |
| PGM | 466 | Integrated Pest Control | Management of pests affecting golf turf and landscape plants. Structural Pest Control Board sprayer certification preparation offered during the semester. | N | LEC | N | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 2 | | |
| PGM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-12 | | |
| PGM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Morrison School of Agribusiness | 1-4 | | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 101 | Introduction to Philosophy | Explores issues that philosophers have traditionally considered, including morality, reality, and knowledge. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 103 | Principles of Sound Reasoning | Fallacies, validity, and soundness of arguments. May include syllogistic, elementary symbolic, inductive logic, and scientific method. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101, 105 or 107 with C or better |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 105 | Intro to Ethics | Philosophical examination of such questions as, How should we live? Is morality a social invention? Does anything matter? | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |

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| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 120 | Introduction to Medical and Bioethics | Philosophical examination of moral problems that arise in medicine and biology, e.g., end-of-life, reproduction, and patient's rights. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 205 | Philosophy and Film | Introduces philosophical themes via the medium of film. Students read classical and contemporary literature in philosophy, view films that portray philosophical concepts, and demonstrate their understanding through writing assignments and class presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Credit is allowed for only PHI 205 or PHI 294 (Philosophy and Film) |
| PHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | 300 | Philosophical Argument and Exposition | Develops techniques of philosophical argument and exposition. Frequent written exercises. Course content may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Prerequisite(s): Philosophy majors; minimum 25 hours; ENG 102 with C or better |
| PHI | 303 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much as secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| PHI | 304 | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 304 | Existentialism | Covers such topics as absurdity, authenticity, the meaning of life and death, responsibility, and subjectivity. May include readings in phenomenology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 306 | Applied Ethics | Philosophical discussion of contemporary moral and political issues, such as abortion, euthanasia, animal rights, affirmative action, and sexual rights. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 307 | Philosophy of Law | Nature and source of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 307 | Philosophy of Law | Nature and source of law and its relation to morality. Legal rights, legal enforcement of morals, civil disobedience, liability and responsibility, punishment, judicial reasoning, justice, property, and differences between theories of natural and positive law. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |

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| PHI | 310 | Environmental Ethics | Examines a full range of philosophical positions pertaining to our moral relationship to the natural world; anthropocentrism, individualism, biocentrism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Credit is allowed for only BIO 324 or PHI 310 |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 311 | Philosophy and Literature | In-depth study of selected literary and philosophic texts. Addresses philosophical problems such as the nature of moral goodness and human relations; the purpose of life; or the relations among beauty, truth and justice. Also addresses whether literary aspects of philosophical texts such as myth, image, metaphor or rhetorical devices contribute to meaning or promote ethical insight as well as interdisciplinary tensions and bridges between rhetoric and philosophy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 313 | Probability, Evidence, and Decision | Philosophical topics in epistemology and practical reasoning; probability and its use in representing and reasoning about belief, evidence, and rational choice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MAT 119 (or higher); Minimum 30 hours; Credit is allowed for only HPS 313 or PHI 313 |
| PHI | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | 314 | Philosophy of Science | Structure and justification of scientific theories, explanation, and theory change. Roles of observation and laws, theoretical concepts and entities, reduction, probability, confirmation, space and time, and causation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Credit is allowed for only HPS 314 or PHI 314. |
| PHI | 318 | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| PHI | 318 | Philosophy of Religion | Classical arguments for the existence of God. Argument from evil against the existence of God. Justification of religious belief. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 319 | Philosophy, Computing and Artificial Intelligence | Philosophical problems surrounding artificial intelligence (AI). Thinking as computation and AI; the ethics, epistemology and metaphysics of computing. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | CS | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 320 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only BIO 312 or IAS 340 or PHI 320 |
| PHI | 320 | Bioethics | Critical examination of moral questions arising in biomedical contexts, particularly due to new technologies and scientific discoveries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 322 | History and Philosophy of Sustainability | Examines sustainability issues in a broadly interdisciplinary way, but with a special emphasis on humanities perspectives, focusing on human ideas, values and institutions as they have evolved over time. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours; Credit is allowed for only HST 308 or PHI 322 or SOS 309 or BIO/HST/PHI/SOS 394 (History & Philosophy of Sustainability) |
| PHI | 324 | Existential Ethics | Ethical aspects of theistic and atheistic accounts of existentialist philosophy. Freedom and responsibility and their significance in human experiences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| PHI | 325 | Philosophy of Social Science | Philosophical problems surrounding the aims, structure, and methods of the social sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |

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| PHI | 326 | Philosophy of Happiness | Examines ancient and contemporary philosophical models of happiness and consideration of criteria for living a life of human flourishing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| PHI | 328 | History of Ancient Philosophy | History of Western philosophy from its beginnings through the Hellenistic period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 25 hours |
| PHI | 329 | History of Modern Philosophy | History of Western philosophy from the Renaissance through Kant. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 330 | Theory of Knowledge | Nature, sources, and limits of human knowledge. Topics may include truth, a priori knowledge, empirical knowledge, perception, induction, and skepticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 331 | Philosophy of Language | Problems pertaining to the nature of language, including meaning, reference, truth, definition, analyticity, translatability, synonymy, and contributions of contemporary linguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 332 | Metaphysics | Problems pertaining to the nature of reality. Topics may include nature of person, minds, substance, universals, space, time, causation, and modality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 333 | Symbolic Logic | Studies symbolic techniques to represent knowledge, deductive arguments, refutation by counter-example, and model-theoretic representation. Covers propositional and first-order predicate logic and provides a deeper understanding of theories about the world and of reasoning in life generally. Students gain a valuable tool for any field or discipline in which rigorous thinking is necessary such as science, medicine, business and the legal profession. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102 or 105 or 108 with a C or better; Minimum 25 hours |
| PHI | 334 | Philosophy of Mind | Nature of consciousness. Common sense view of mind, behaviorism, materialism, dualism, functionalism, self-knowledge, and knowledge of other minds. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 335 | History of Ethics | Major works of moral philosophy, both ancient and modern, such as those by Plato, Aristotle, Hobbes, Hume, Kant, and Mill. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 335 | History of Ethics | Major works of moral philosophy, both ancient and modern, such as those by Plato, Aristotle, Hobbes, Hume, Kant, and Mill. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 336 | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 336 | Social and Political Philosophy | Alternative principles and methods relevant to problems of human association and conflict; discusses justice and power, freedom and equality, and autonomy and order. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 337 | Ethical Theory | Theories in normative ethics about the nature of what is right and wrong, good and bad, virtuous and vicious. May include issues in metaethics. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 338 | Metaethics | Concerns questions about the nature of value, morality, and normativity in general, such as "Is morality objective, subjective, or relative?" | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 (or ENG 105 or 108) with C or better; minimum 25 hours. Credit is allowed for only PHI 338 or PHI 420 (Metaethics) |
| PHI | 339 | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 339 | Philosophy of Art | Central problems in philosophy of art, e.g., the nature of a work of art, modern and traditional theories of art, aesthetic perception and experience, and objectivity and relativity in art criticism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 347 | Philosophical Theories of Constitutional Interpretation | In-depth study of the philosophical theories surrounding constitutional rights and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours |
| PHI | 360 | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 360 | Business and Professional Ethics | Examines moral theories applied to cases of corporate responsibility, property rights, environment, fairness, profit, employee rights, and responsibilities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 hours |
| PHI | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHI | 390 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| PHI | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357, PHI 391 or REL 391 |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | 401 | Rationalism | Examines classical philosophical rationalism, as in Descartes, Spinoza, Malebranche, or Leibniz. Contemporary rationalist thought may also be examined. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 402 | Empiricism | Examines representatives of either classical or contemporary philosophical empiricism, e.g., Bacon, Hobbes, Locke, Butler, Berkeley, Reid, Hume, Mill, Carnap, and Ayer. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 403 | Contemporary Analytic Philosophy | Aims and methods of such 20th-century philosophers as Frege, Moore, Russell, Wittgenstein, Carnap, Ayer, Wisdom, Ryle, Austin, Strawson, Quine, and Sellars, with application to metaphysics and epistemology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Undergraduate Philosophy student; Minimum 56 hours |
| PHI | 405 | Moral Psychology | Advanced study of key, contemporary authors and issues in moral psychology as a subfield of philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate major; minimum 56 hours; Credit is allowed for only PHI 405 or PHI 420 (Moral Psychology) or PHI 530 |
| PHI | 406 | Moral Dilemmas | Philosophical analysis of moral dilemmas arising in professional and public settings. Ethical decision making in business, educational, human service, and scientific communities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better. Credit is allowed for only FOR 406 or IAS 406 or PHI 406 |
| PHI | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| PHI | 407 | Environmental Philosophy and Policy | Ethical concepts and theories applied to environmental issues: biotic community, biodiversity, degradation, ecofeminism, ecology, economics, population, property rights, and wilderness. Not open to students with credit in PHI 310. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Pre-requisites: ENG 101 or 105 with C or better. Credit is allowed for only IAS 407 or PHI 407 |
| PHI | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | 408 | Feminist Ethics | Philosophical exploration of the theoretical and practical aspects of ethical issues affecting women from diverse feminist viewpoints. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 45 earned hours. Credit is allowed for only IAS 408 or PHI 408 |
| PHI | 409 | Eco-Community Ethics | Traces human interaction with the Earth from hunters and gatherers to the present day, examining groups who have lived within ecological constraints and limits. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Credit is allowed for only IAS 409 or PHI 409 |
| PHI | 411 | Continental Philosophy | Contemporary European thought emerges out of a crisis of the Enlightenment that unfolds throughout the 19th and 20th centuries. Kant's critique of the theoretical, practical, aesthetic and religious foundations articulates this crisis in Western philosophy, society and culture. Explores Continental thinkers and schools of thought in light of Kant's understanding of this crisis. Figures might be Nietzsche, Marx, Freud, Kierkegaard, Husserl, Heidegger, Benjamin, Adorno, Marcuse, Sartre, de Beauvoir, Irigaray, Kristeva, Spivak, Habermas, Lévinas, Marion, Derrida and others. Schools of thought considered may include existentialism, phenomenology, hermeneutics, critical theory, poststructuralism, deconstruction, feminist theory, critical race theory, postcolonial theory, and comparative philosophy. Continental philosophy dovetails with other fields like communication, cultural studies, law, political science, religious studies, literature and various social sciences. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 30 hours. Credit is allowed for only PHI 411 or PHI 494 (Continental Philosophy & Religion) or PHI 494 (Studies in Continental Philosophy) |

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|---------|-------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|----------------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PHI | 412 | Philosophy and Literary Criticism | Explores dynamic tensions between philosophical and literary critical approaches to texts. Aims to identify distinct ways that literature and critical practices "philosophize" about truth, moral dilemmas or existential struggles. Probes the challenges that each form of inquiry, philosophical and critical, poses for the other. Seeks to enhance understanding of the philosophical underpinnings of key literary works. May address poetry, novels and other media. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): ENG 101 or 105 or 107 with C or better; minimum 30 hours. Credit is allowed for only PHI 412 or PHI 494 (Philosophy and Literature) or ENG 401 (Philosophy and Literary Criticism) |
| PHI | 413 | Advanced Symbolic Logic | Properties of formal systems axiomatizing propositional and 1st-order predicate logic. May also include modal logic, number theory, and limits of logicism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): undergraduate Philosophy student; minimum 56 hours; Credit is allowed for only PHI 413 or PHI 556 |
| PHI | 420 | Topics in Philosophy | Course descriptions on file in department. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): undergraduate Philosophy major; minimum 56 hours |
| PHI | 421 | Philosophical Topics | Focuses on important issues within the discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| PHI | 428 | Immunophilosophy | Integrates immunology and philosophy, including psychoneuroimmunology and the mind-body problem, and immunologic/psychologic perspectives on self and self-identity. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: MIC 420, PHI 317, HPS314, or PHI 428 with C or better. Credit is allowed for only MIC 428 or PHI 428 |
| PHI | 439 | Philosophy of Love and Sex | Advanced introduction to historical and contemporary philosophical writings and sociological case studies on the philosophy of sex and love. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only PHI 439 or PHI 494 (Philosophy of Love and Sex) |
| PHI | 448 | Justice and Reparations | Advanced study of the moral basis of reparations and reparative justice. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy undergraduate major; minimum 56 hours; Credit is allowed for only PHI 420 (Jus/Reparations) or PHI 448 or PHI 527 |
| PHI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHI | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| PHI | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHI | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | L | |
| PHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| PHI | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |

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| PHI | 501 | Foundations of Ethics I | Studies primary texts of classic ethical theories and their applications to various issues in daily life and the professions. Ethical traditions include some of these frameworks: virtue ethics and natural law ethics, consequentialism and contractualism, deontology and critical communitarianism. Pays attention to the shifting nature of the relation between ethics and religion. In the applied, activity-portion of the course, students investigate real-life ethical issues and examine them from several normative perspectives. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PHI | 520 | Topics in Applied Philosophy | Selected topics in applied philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 521 | Bioethics | Addresses current controversies and major topics in bioethics and biosciences. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Found-Bioethics) or PHI 521 |
| PHI | 522 | Ethics of Sustainability | Explores the normative framework of sustainability. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Topics in the Ethics of Sustainability) or PHI 522 |
| PHI | 524 | Disaster Ethics | Investigates moral and political questions connected to disasters and emergencies such as obligations of aid workers, responsibilities for preparedness and rebuilding, and related social justice questions. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Ethics and Disaster) or PHI 524 |
| PHI | 525 | Rational Choice | Recent philosophical work on rational decision making. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Rational Choice) or PHI 525 |
| PHI | 526 | Evolution and Strategic Interaction | Recent work on the philosophical significance of evolutionary models of social interactions and social structures. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 527 | Justice and Reparations | Explores the moral, legal and political aspects of reparative justice after episodes of mass violence, massive human rights violations and intergenerational harms to specific groups (for example, African-Americans and Indigenous peoples). Explores what normative moral conceptions of reparative and restorative justice support obligations to repair historical injustice, as well as contemporary forms of systemic or structural injustice for affected groups. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Jus/Reparations) or PHI 448 or PHI 527 |
| PHI | 529 | Feminist Philosophy | Examines contemporary feminist work in some of the subfields of philosophy, such as ethics, political philosophy, epistemology. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Feminist Philosophy) or PHI 529 |
| PHI | 530 | Moral Psychology | Central issues and texts in moral psychology including the impact of psychological research on philosophical theorizing. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 405 or PHI 420 (Moral Psychology) or PHI 530 |
| PHI | 531 | Philosophy of Emotion | Theories of what an emotion is and the relevance of emotion to work in various subfields of philosophy such as ethics and philosophy of fiction. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 532 | Experimental Philosophy | Examines experimental work taken to directly bear on important philosophical theories. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Experimental Philosophy) or PHI 532 |
| PHI | 533 | Philosophy and Art | Recent philosophical work in the philosophy of fiction, visual art and/or music. Also discusses the fittingness of art works to address philosophical topics, especially in ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Philosophy of Art) or PHI 533 |
| PHI | 540 | Topics in Value Theory | Selected topics in value theory. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 541 | Normative Ethics | Explores one or more leading normative ethical theories that inform the contemporary discussions in ethics, applied ethics, issues of justice and human rights, and public policy. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Normative Ethics) or PHI 541 |
| PHI | 544 | Studies in Meta-Ethics | Selected topics in meta-ethics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 545 | Studies in Philosophy of Law | Selected topics in the philosophy of law. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |

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| PHI | 546 | Studies in Political Philosophy | Selected topics or figures in political philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 555 | Topics in Formal Methods | Selected topics in formal methods. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 556 | Advanced Symbolic Logic | Advanced topics in logic relevant to philosophical theorizing such as modal, deontic and temporal logic. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 557 | Philosophy of Mathematics | Examines selected topics and theories in the philosophy of mathematics. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Philosophy of Mathematics) or PHI 557 |
| PHI | 560 | Topics in Epistemology | Selected topics in epistemology | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 562 | Perception | Recent work on the nature and content of perception. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): Philosophy MA or PhD major; Credit is allowed for only PHI 420 (Perception) or PHI 562 |
| PHI | 565 | Probabilism | Recent work on rational belief, evidence and belief change. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 566 | Studies in Philosophy of Science | Selected topics in philosophy of science. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 570 | Topics in Metaphysics | Selected topics in metaphysics | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 571 | Studies in Philosophy of Mind | Selected recent philosophical work in philosophy of mind such as the nature of sensation and perception, theories of consciousness, and the unity of the self | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 572 | Studies in Philosophy of Language | Selected recent philosophical work in philosophy of mind language as theories of meanings, direct reference and vagueness. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): MA or PhD Philosophy major. Credit is allowed for only PHI 420 (Philosophy of Language) or PHI 572 |
| PHI | 576 | Realism | Recent work on realism and anti-realism, starting with Michael Dummett, and including philosophers such as Hilary Putnam, Donald Davidson, John McDowell and Kit Fine. Global realism and anti-realism and more specific realisms/antirealisms about the past, the mind, theoretical entities, mathematics and ethics. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 581 | Studies in Ancient Greek Philosophy | Selected topics in ancient philosophy from 585 BC to 529 AD. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 582 | Studies in Modern Philosophy | Selected topics and significant figures in the modern period. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 586 | 20th and 21st C. Philosophers | Examines the work of one or more philosophers prominent in the 20th or 21st century. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 587 | Topics in the History of Philosophy | Selected topics in the history of philosophy. | Y | SEM | Y | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Philosophy Masters or Doctoral student |
| PHI | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisites: Masters or Doctoral Philosophy student. |

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| PHI | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| PHI | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHI | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHI | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | PRA | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PHI | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHI | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| PHI | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| PHL | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| PHL | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHS | 110 | Fundamentals of Physical Science | One-semester survey of the principles of physics and chemistry. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHS | 208 | Patterns in Nature | Examines topics from optics to analytical techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Credit is allowed for only MSE 208 or PHS 208 |
| PHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |
| PHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 505 | Energy and the Environment | Current problems in energy resources, production, consumption, and conservation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 530 | Methods of Physics Teaching I | Inquiry approach to high school physics teaching. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 531 | Methods of Physics Teaching II | Extension of modeling techniques introduced in PHY 580. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 534 | Methods of Teaching Physical Science I, II, III | Design of curriculum and conduct of instruction for physical science courses. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 540 | Integrated Physics and Chemistry | Collaborative inquiry methods for teaching and coordinating physics and chemistry. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CHM 540 or PHS 540 |
| PHS | 542 | Integrated Mathematics and Physics | Mathematical models and modeling as an integrating theme for secondary mathematics and physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 556 | Astrophysics | Structure and evolution of stars, galaxies, and the universe. For secondary school teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 560 | Matter and Light | Interactions of light with matter. Lasers and spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 570 | Spacetime Physics | Special and general theories of relativity with implications for space and time travel. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHS | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 581 | Structure of Matter and its Properties | Models of matter and its properties. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only CHM 581 or PHS 581 |
| PHS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |
| PHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | SQ | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | |
| PHY | 101 | Introduction to Physics | Emphasizes applications of physics to life in the modern world. Presumes understanding of elementary algebra. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | SQ | |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Prerequisite(s): MAT 170 or higher with C or better, or minimum score of 56% on the Mathematics Placement Test, or Corequisite(s): MAT 210 or higher |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Prerequisite(s): MAT 170 or higher with C or better, or minimum score of 56% on the Mathematics Placement Test, or Corequisite(s): MAT 210 or higher |
| PHY | 111 | General Physics | Noncalculus treatment of the principles of physics for nonphysics majors. Students whose curricula require a lab course must also register for PHY 113. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Prerequisite(s): MAT 170 or higher with C or better, or minimum score of 56% on the Mathematics Placement Test, or Corequisite(s): MAT 210 or higher |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: PHY 111 with C or better |

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| PHY | 112 | General Physics | Continuation of PHY 111. Students whose curricula require a lab course must also register for PHY 114. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SQ | Pre-requisites: PHY 111 with C or better |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 113 | General Physics Laboratory | Elementary experiments in physics. Requires outside preparation for experiments and report writing. May be taken concurrently with, or subsequent to PHY 111. Both PHY 111 and PHY 113 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 111 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 114 | General Physics Laboratory | See PHY 113. May be taken concurrently with, or subsequent to, PHY 112. Both PHY 112 and PHY 114 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1 | SQ | Pre/Co-requisite: PHY 112 with C or better if completed |
| PHY | 118 | Explorations in Science Teaching | Examines the field of physical science education via in-class meetings and classroom settings. Discusses the theory, pedagogy and practice of teaching physical science. Reviews various curricula available for the teaching of physical science with a focus on state and national standards. Students work with course instructor(s) to design three lessons that work toward some of the objectives of each cooperating teachers' class. Students are aided in developing materials, guided in planning to teach the lesson, and given time to prepare and practice the lesson. | N | SEM | N | GNA | Liberal Arts and Sciences | Department of Physics | 1 | | Pre-requisite: Mathematics or Physics or other science major |
| PHY | 121 | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | 121 | University Physics I: Mechanics | Kinematics; Newton's laws; work, energy, momentum, conservation laws; dynamics of particles, solids, and fluids. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisite: MAT 266 or MAT 271 with C or better if completed |
| PHY | 122 | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |
| PHY | 122 | University Physics Laboratory I | Lab accompanying PHY 121. Both PHY 121 and PHY 122 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 121 with C or better if completed |
| PHY | 131 | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 131 | University Physics II: Electricity and Magnetism | Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 121 with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 132 | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | 132 | University Physics Laboratory II | Lab accompanying PHY 131. Both PHY 131 and PHY 132 must be taken to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 1 | SQ | Pre/Co-requisite: PHY 131 with C or better if completed |
| PHY | 150 | Physics I | Introductory physics for majors. Kinematics, Newton's Laws, basic forces, energy, momentum, special relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 265 or MAT 270 with C or better; Pre/Co-requisites: MAT 266 or MAT 271 with C or better if completed |
| PHY | 151 | Physics II | Continuation of PHY 150. Electromagnetic fields; Ampere's and Faraday's Laws; Maxwell's equations; basic circuit elements. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Pre-requisites: MAT 266 or MAT 271 with C or better; PHY 150 (or PHY 121 and PHY 122) with C or better; Pre/Co-requisite: MAT 267 or MAT 272 with C or better if completed |
| PHY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | Pre-requisites: Freshman student; Maximum 25 hours |
| PHY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 201 | Mathematical Methods in Physics I | Differential equations, linear equations, vectors, matrices, Fourier series, and numerical methods. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | CS | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |

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| PHY | 241 | University Physics III | Thermodynamics, kinetic theory, physical and wave optics, relativity, photons, matter waves, atomic physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 131 |
| PHY | 252 | Physics III | Continuation of PHY 151. Wave physics, oscillations, harmonic systems, physical optics, thermodynamics, kinetic theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 4 | SQ | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 or PHY 131 and 132 with C or better |
| PHY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 302 | Mathematical Methods in Physics II | Continuation of PHY 201. Vector calculus, complex variables, partial differential equations, special functions, numerical methods. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY201 with C or better |
| PHY | 310 | Classical Particles, Fields, and Matter I | Particle kinematics, mechanics, conservation laws, particle motion in force fields, dynamics of two-body systems, reference frames, rigid body motion, relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 201 with C or better; PHY 252 with C or better. Co-requisite: PHY 302 |
| PHY | 311 | Classical Particles, Fields, and Matter II | Electrostatic and gravitational fields, Poisson and Laplace equations, dielectric materials, magnetic fields and materials, magnetic induction, Faraday's Law. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 310 with C or better |
| PHY | 312 | Mechanics and Electromagnetism | Covers two major topics in physics, both dealing with forms of energy and momentum and how they are transmitted in space. Covers mechanics and dynamics, describing how bodies with mass move under various types of forces. Also covers electromagnetism, which describes how electric charges and magnets, and their motions, generate fields of force. Also describes how time-varying electric and magnetic fields are associated with electromagnetic waves, which include light. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 150, 151, and 252 (or PHY 121, 122, 131 and 132) with C or better |
| PHY | 314 | Quantum Physics I | Photons, models of the atom, wave properties of matter, introduction to wave mechanics, 1-D systems in quantum mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisites: PHY 201 with C or better; PHY 252 with C or better |
| PHY | 315 | Quantum Physics II | General principles of quantum mechanics, 3-D problems, approximation methods, spin, introduction to many-particle systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 314 with C or better |
| PHY | 321 | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | 321 | Vector Mechanics and Vibration | Vector-based formulation of Newtonian mechanics of particles and rigid bodies, including oscillatory systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 331 | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| PHY | 331 | Principles of Modern Electromagnetism | Studies the unified description of electromagnetic phenomena provided by Maxwell's equations in differential and integral form. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 333 | Electronic Circuits and Measurements | Basic principles of electronic circuit analysis and measurement techniques using modern instrumentation and computer-aided analysis of data. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: MAT 272 or MAT 267 with C or better; PHY 151 (or PHY 131 and PHY 132) with C or better |
| PHY | 334 | Advanced Laboratory I | Selected experiments from contemporary physics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report form writing. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | L | Prerequisite(s): MAT 267 or 272 with C or better; PHY 151 (or PHY 131 and 132) with C or better; Pre- or Corequisite(s): PHY 314, 361, CHM 345 or EEE 434 |
| PHY | 361 | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | 361 | Introductory Modern Physics | Special relativity and introductory quantum theory with applications drawn from atomic, nuclear, and solid-state physics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | PHY 131 or PHY 151 with C or better; MAT 272 or MAT 267 with C or better |
| PHY | 371 | Driving Forces in Biology | What are the stable states of biomolecules? How do molecules interact? What forces drive molecules to bond and associate, to adsorb, to permeate through membranes, to undergo chemical reactions, to undergo conformational changes? Why are some changes gradual, as in the weakening of a ligand interaction with temperature, and others sudden (cooperative) such as protein folding or the insolubility of oil in water? Addresses these questions by statistical thermodynamics, a collection of principles and models that when combined with thermodynamics, aim to explain molecular forces and flows. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 252 |
| PHY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| PHY | 412 | Classical Particles, Fields, and Matter III | Electromagnetic fields of moving charges, Maxwell's equations, harmonic phenomena, oscillations, waves, electromagnetic radiation, covariant electromagnetism, introduction to general relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 311 with C or better |
| PHY | 416 | Quantum Physics III | Introduces the quantum theory of atoms, molecules, solids and nuclei, Dirac's equation. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 315 with C or better |

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| PHY | 441 | Statistical and Thermal Physics | Statistical and experimental basis of heat, temperature, and entropy. Mechanical and statistical basis of the laws of thermodynamics. Applies macroscopic thermodynamics. Phase equilibrium. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 444 | Fundamentals of Nanoscience | For senior science majors and beginning graduate students teaching the cross-disciplinary subject of nanoscience. There is a strong emphasis on basics, so the course starts with a fairly rigorous introduction to quantum mechanics, statistical mechanics and chemical kinetics, though enough material is provided to allow nonphysics majors to come up to speed in these areas. This is followed by a survey of experimental techniques in nanoscience: microscopy, optical spectroscopy and scanning probe methods, and nanofabrication methods including "top down" and self assembly. Finally we survey applications: electrons in nanostructures, molecular electronics, nanomaterials and bio-nanoscience. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Junior or Senior standing; Credit is allowed for only PHY 444 or 494 (Intro to Nanoscience) |
| PHY | 452 | Physical Optics | Principles of reflection, refraction, diffraction. Additional topics from contemporary optics may include Fourier transform spectroscopy, linear systems theory, holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 302 with C or better; PHY 311 with C or better |
| PHY | 456 | Laser Optics | Theoretical and experimental aspects of applied optics including basic concepts of lasers, properties of optical beams, resonators and interferometry. Course consists of two parts: preparatory labs and applied projects. Preparatory labs provide theoretical and technical background for understanding of general features of electromagnetic wave propagation and technical features of optical lasers including high-power laser systems. Applied projects give students the opportunity to use laser optical systems to solve real-world problems. | N | LEL | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 4 | | Prerequisite(s): PHY 361; Credit is allowed for only ABS 494 (Advanced Laser Laboratory), ABS 494 (Laser Optics) or PHY 456 |
| PHY | 462 | Particle and Nuclear Physics | Nuclear properties, models, decays and reactions; fundamental forces, field theories, symmetry principles; hadrons, quarks, and leptons; the Standard Model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better |
| PHY | 465 | Advanced Laboratory II | Continuation of PHY 334. Students may substitute a short laboratory research project for one of the elective experiments of the course, in consultation with a faculty sponsor and the course instructor. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 334 with C or better |
| PHY | 472 | Advanced Biophysics Lab | Offers selected experiments from contemporary biophysics. Emphasizes modern instrumentation, computer-assisted acquisition and analysis of data, and report writing. Emphasizes the importance of good notebook keeping. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): PHY 371 |
| PHY | 473 | From Molecules to Cells | Offers selected subjects from biological physics covering the length scales from biomolecules to cells. Builds on knowledge acquired from thermodynamics and statistical mechanics to formulate basic principles behind the working of life systems. Free energy, entropic forces, chemical potentials and electrostatic interactions rule the "nanometer soup" of a living cell. Proton gradients across cell membranes are behind all the energy consumed by life. Random walks, dissipative dynamics, and hydrodynamic fluxes rule time-dependent phenomena. Covers systems including biomolecules, membranes, cells and nerves. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: PHY 371 with C or better; Pre/Co-requisite: PHY 472 with C or better if completed |
| PHY | 480 | Methods of Teaching Physics | Evaluates various approaches to the teaching of high school physics. Preparation of demonstrations and experiments. Organization of a lab. Designed for secondary school physics teachers. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 481 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 311 with C or better; PHY 315 with C or better; Credit is allowed for only MSE 526, NAN 511, PHY 481 or 511 |
| PHY | 482 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 481 with C or better. Credit is allowed for only MSE 527, NAN 512, PHY 482 or 512 |
| PHY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Department of Physics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PHY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): minimum 45 hours |
| PHY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | Prerequisite(s): minimum 45 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 495 | Project Research | Supervised project in physics or astrophysics. May be repeated for credit. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-3 | | |
| PHY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-6 | | Prerequisite(s): Barrett Honors student |
| PHY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-7 | | |
| PHY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | Prerequisite(s): minimum 45 hours |
| PHY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-3 | | Prerequisite(s): minimum 45 hours |
| PHY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 511 | Materials Physics I | Fundamentals of materials physics: crystal structure, diffraction, elasticity, point defects, dislocations, lattice vibrations, thermal properties, periodic potential, band structure. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Degree- or nondegree-seeking graduate; Credit is allowed for only MSE 526, NAN 511, PHY 511 |
| PHY | 512 | Materials Physics II | Electronic behavior of materials: energy bands, electronic properties, metals, semiconductors, insulators, optical properties, magnetic properties, superconductivity, biophysics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisites: PHY 511; Credit is allowed for only MSE 527, NAN 512, PHY 482 or PHY 512 |
| PHY | 521 | Classical and Continuum Mechanics | Variational principles, Lagrange's and Hamilton's equations, canonical transformations, Hamilton-Jacobi theory, introduction to chaos and nonlinear dynamics, fundamentals of elasticity theory and fluid mechanics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 523 | General Relativity | Special and general theories of relativity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 531 | Electrodynamics | Special theory of relativity, covariant formulation of electromagnetic interactions, Maxwell's equations, electrostatics and magnetostatics, dielectric media, inhomogeneous wave equations, Lienard-Wiechert potentials, interactions of charged particles and electromagnetic waves, scattering and diffraction. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 541 | Statistical Physics | Postulates of statistical mechanics, equilibrium ensembles, Bose and Fermi statistics, density matrix, modern theory of phase transitions, fluctuations, and linear response theory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 542 | Topics in Biophysics | Overview of modern biology, length scales: emphasizes molecular and cellular biology. Nonequilibrium systems: compare and contrast stochastic processes in biological and physical systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 544 | Introduction to Nanoscience | Survey of nanoscience: quantum/ statistical mechanics/kinetics; measurement and fabrication methods; applications to materials, nano-electronics, molecular electronics and nano-biology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only CHM 544, NAN 544, PHY 444 or PHY 544 |
| PHY | 546 | Surfaces and Thin Films | Thermodynamics and kinetics of surface structures and thin film processes. Ultra-high vacuum techniques for examining surfaces. Case studies of physics, chemistry and nanoscience applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 546, NAN 546 or PHY 546 |
| PHY | 552 | Electron Microscopy I | Kinematical and dynamical electron diffraction and microscopy. Defect structure and composition using STEM imaging, x-ray and electron-energy-loss spectroscopy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 552, NAN 552, SEM 552, or PHY 552 |
| PHY | 553 | Electron Microscopy Laboratory I | Lab support for PHY 552. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Corequisite(s): MSE 552 (or PHY 552). Credit is allowed for only MSE 553 or PHY 553 |
| PHY | 554 | Electron Microscopy II | Determination of structure and composition of materials using high-resolution imaging, convergent beam diffraction, and electron holography. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE or PHY 554 |
| PHY | 555 | Electron Microscopy Laboratory II | Lab support for PHY 554. | N | LAB | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 571 | Quantum Physics | Review modern physics, chemistry, math. Differential equation, operator, matrix formulations. Free particle, bound state problems. Examples from physics, chemistry and nanoscience. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Credit is allowed for only MSE 571, NAN 571 or PHY 571 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 576 | Quantum Theory | Operator methods in quantum mechanics, time-independent perturbation theory, variational methods, angular momentum and group representation theory, identical particles; quantum dynamics, including time-ordered operators, time-dependent perturbation theory, and Fermi's golden rule. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 577 | Introduction to Quantum Field Theory | Explains necessity of generalizing quantum mechanics to a field theory viewpoint. Studies properties of scalar, spinor, and gauge fields; incorporates interactions; and learns to compute amplitudes, cross sections, and decay rates using formalism of Feynman diagrams. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PHY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 581 | Quantum Theory of Solids I | Band structure models: pseudopotentials, density functional theory; optical and magnetic response; elementary excitations; transport theory, electron-photon interactions and superconductivity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 582 | Quantum Theory of Solids II | Continuation of PHY 581: broken symmetry; phase transitions; disorder, topological defects; nano-structures topics; soft condensed matter and current research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Physics | 3 | | |
| PHY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-4 | | |
| PHY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Physics | 1-12 | | |
| PHY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PHY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Physics | 1 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PHY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | Department of Physics | 1-15 | | |
| PLA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | The Design School | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-7 | | |
| PLA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-3 | | |
| PLA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-4 | | |
| PLA | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |

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| PLA | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | The Design School | 1-12 | | |
| PLA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | The Design School | 1 | | |
| PLB | 108 | Concepts in Plant Biology | Introduces concepts of plant biology that are of human relevance using commercially important, edible, and medicinal plants as examples. Not for majors in the biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | SQ | |
| PLB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 300 | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better; Credit is allowed for only LSC 307 or PLB 300 |
| PLB | 300 | Plant Diversity and Evolution | An examination of the major groups of land plants, emphasizing evolutionary history, comparative data, and phylogenetic methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | L or SG | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or PLB 200) with C or better or BIO 281 and BIO 282 with C or better; Credit is allowed for only LSC 307 or PLB 300 |
| PLB | 302 | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 302 | Plants and Civilization | Plants and plant products used by people throughout the world. Cultivation, processing, and uses in modern life (beverages, fibers, foods, medicinals, and perfumes). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 305 | Cacti and Succulents | Adaptive biology of desert annuals, cacti, and succulents, analyzing diverse traits that permit survival in deserts: reproduction, structure, and physiology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 306 | Plant Anatomy | Development and mature structure of tissues of vascular plants; patterns and modifications of the leaf, stem, root, and flower. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 308 | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 308 | Plant Physiology | Concepts of plant function: carbon metabolism, energy acquisition, regulation of growth and development, stress responses, and water and nutrient uptake. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better; CHM 116 with C or better |
| PLB | 310 | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 with C or better |
| PLB | 310 | The Flora of Arizona | Overview of Arizona's flora and plant communities; emphasizes identification, classification, and natural history of the state's native vascular species. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) OR BIO 281 and 282 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PLB | 350 | Applied Genetics | Introduces molecular genetics with emphasis on application of genetics to solve biological questions and to engineer organisms for biotechnology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Prerequisite(s): BIO 340 or MBB 247 or MBB 347 with C or better; Credit is allowed for only MBB 350 or PLB 350 |
| PLB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | Prerequisite(s): minimum 45 hours |
| PLB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): minimum 45 hours |
| PLB | 401 | Mycology | Fungal morphology and systematics with an introduction to fungal cell biology, ecology, economic significance, and growth and development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 407 | Plant Fossils and Evolution | Broad survey of plant life of the past, including the structure of plant fossils, their geologic ranges, geographic distribution, and paleoenvironment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 4 | | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 414 | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 414 | Plant Pathology | Identification and control of biotic and abiotic factors that cause common disease problems to plants. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | L | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and 201) with C or better OR BIO 281 and 282 with C or better |
| PLB | 419 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 or PLB 308 with C or better; Credit is allowed for only BIO 419, PLB 519, BIO 519 or PLB 419 |
| PLB | 420 | Plant Ecology: Organisms and Populations | Factors and controls on the physiological ecology and organization of plants and plant populations using empirical and theoretical approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 320 with C or better |
| PLB | 422 | Plant Geography | Plant communities of the world and their interpretation, emphasizing North American plant associations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) or PLB 200 with C or better; Credit is allowed for only GPH or PLB 422 |
| PLB | 432 | Computer Applications in Biology | Computer analysis techniques in biology emphasizing data entry, management and analysis, and graphic portrayal. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | CS | Pre-requisites: BIO 181 (or BIO 188) and BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 406 or PLB 432 |
| PLB | 440 | Photobiology | Principles underlying the effects of light on growth, development, and behavior of plants, animals, and microorganisms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: BIO 181 (or BIO 188) with C or better; BIO 182 (or BIO 187 or both PLB 200 and PLB 201) with C or better OR BIO 281 and 282 with C or better; Credit is allowed for only BIO 464 or PLB 440 |
| PLB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 495 | Undergraduate Research | Supervised research in biology/microbiology/molecular biosciences and biotechnology/or plant biology. | N | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | Pre-requisite: Junior or senior standing |
| PLB | 496 | Undergraduate Thesis | Guided research culminating in the preparation of an undergraduate thesis based on supervised research done in this and previous semesters. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only MBB 496, BIO 496, MIC 496 or PLB 496 |
| PLB | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-7 | | |
| PLB | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-3 | | |
| PLB | 502 | Perspectives in Plant Biology | Introduces major areas of research within the department with the goal of broadening knowledge to enable multidisciplinary research and communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 519 | Physiological Plant Ecology | Physiological and morphological responses and adaptations of plants to their environment, emphasizing mechanisms that influence carbon and water balance, growth, and population distributions | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | Pre-requisites: Graduate student; Credit is allowed for only PLB 419, BIO 419, BIO 519 or PLB 519 |
| PLB | 525 | Microclimate Methods | Techniques to measure and quantify microclimate and mass transfer. Supporting principles. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 558 | Molecular Mechanisms of Photosynthesis | Structure and function of photosynthetic complexes; mechanism of energy conversion in plants, bacteria, and model systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Life Sciences | 3 | | |
| PLB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |

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| PLB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-4 | | |
| PLB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Life Sciences | 1-12 | | |
| PLB | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |
| PLB | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of Life Sciences | 1 | | |
| PLB | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Life Sciences | 1-15 | | |
| PLC | 101 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 102 | Elementary Polish | Structural grammar, basic vocabulary; introduction and reinforcement of aural/oral, reading, and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| PLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 201 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | |
| PLC | 202 | Intermediate Polish | Systematic review of grammar. Development of vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Pre-requisites: PLC 201 with D |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 311 | Advanced Polish I | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 202 with C or better; Credit is allowed for only PLC 311 or 394, Polish Comp and Conversation |
| PLC | 312 | Advanced Polish II | Develops writing ability and oral expression. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: PLC 311 with C or better |
| PLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 11-12 | | |
| PLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| PLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| PLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 101 | Elementary Portuguese | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| POR | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| POR | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 201 | Intermediate Portuguese | Continuation of POR 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites: POR 101 with C or better |
| POR | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 313 | Portuguese Composition and Conversation | Develops skill in written Portuguese and corrected oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 201 with C or better |
| POR | 314 | Portuguese Composition and Conversation | Continuation of POR 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: POR 313 with C or better |
| POR | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 472 | Luso-Brazilian Civilization | Lectures, readings, and discussion of important aspects of Luso-Brazilian civilization. Topics from music, art, folklore, literature, history, and politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisites: POR 313 with C or better; Credit is allowed for only POR 472 or 598 (Luso-Brazilian Civilization) |
| POR | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485, GPH 485, LAP 485, POR 485, PUP 485 or 585 |
| POR | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| POR | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POR | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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|---------|-------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|----------------------------------------------|-------|-----------------|-------------------------------------------------------------------------------------|
| POR | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| POR | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POR | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| POR | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| POR | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 110 | Government and Politics | Major institutions of modern government and processes of individual and group political activity, with emphasis on the American experience. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only HST 112 or POS 112 or HST 194 (Foundations of Democracy) |
| POS | 112 | Foundations of Democracy | Introduces an interdisciplinary study of democracy with special attention to its historical development as a form of government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Credit is allowed for only HST 112 or POS 112 or HST 194 (Foundations of Democracy) |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 150 | Comparative Government | Political institutions and processes in selected foreign countries, including origins, strengths, and weaknesses of contemporary political systems and political development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 160 | Global Politics | Nature of contemporary world politics through the study of both general theoretical topics and specific geographical areas. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 160, POS 360 or POL 360 |
| POS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | Pre-requisites: Freshman status; Maximum 25 hours |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | Prerequisite(s): maximum 25 hours |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | Prerequisite(s): maximum 25 hours |
| POS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): maximum 25 hours |

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|---------|-------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|---------------------------------------------------------------|
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 210 | Political Ideologies | Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 211 | Arizona Constitution and Government | Constitution and government of the State of Arizona. Meets the Arizona constitution requirement for teacher certification. May not be counted for the major or a teaching major or minor in Political Science. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 2 | | Credit is allowed for only POS 211 or POS 216 or POS 417 |
| POS | 211 | Arizona Constitution and Government | Constitution and government of the State of Arizona. Meets the Arizona constitution requirement for teacher certification. May not be counted for the major or a teaching major or minor in Political Science. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 2 | | Credit is allowed for only POS 211 or POS 216 or POS 417 |
| POS | 216 | State and Local Government | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POS 211 or POS 216 or POS 417 |
| POS | 216 | State and Local Government | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POS 211 or POS 216 or POS 417 |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L or SB | |
| POS | 230 | Current Issues in National Politics | Major issues facing national governments in the domestic field. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | |
| POS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| POS | 247 | Introduction to Latin American Politics | General introduction to the politics and socioeconomic structures of Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or SB) & G | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | |
| POS | 260 | Current Issues in International Politics | Analyzes major current problems in world politics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & G | |
| POS | 270 | American Legal System | Concepts, institutions, classifications, and functions of law. Role of the courts and impact of judicial decision making on social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | 300 | Contemporary Global Controversies | Explores key controversies in global politics including security, economic stability, poverty, gender, race, and the environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 301 | Empirical Political Inquiry | Logic of political inquiry, including research problems, concepts, hypotheses, theories, measurement, data collection, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 301 | Empirical Political Inquiry | Logic of political inquiry, including research problems, concepts, hypotheses, theories, measurement, data collection, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 305 | Politics and Film | Examines portrayal of political events, ethnic groups, and sociopolitical situations in film, a major medium addressing questions of human values. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 310 | American National Government | Powers, functions, and agents of American political institutions. Meets the federal government requirement for teacher certification. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 110, 310, POS 110 or 310 |
| POS | 313 | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Credit is allowed for only POL 313 or POS 313 |
| POS | 313 | The Congress | Lawmaking process in the U.S. Congress. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POL 313 or POS 313 |
| POS | 314 | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 314 | The American Presidency | Office, role, and power of the American presidency in the American political system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 315 | The Supreme Court | Role of the Supreme Court in American society and politics; examines decision-making process and impact of decisions; restraint versus activism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| POS | 317 | History of Postwar U.S. Conservatism | Traces the origins of U.S. conservatism as it developed in the work of U.S. and European thinkers, intellectuals and authors after WWII | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only HST 294 (American Conservatism), 317 or POS 317 |
| POS | 325 | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 325 | Public Policy Development | Examines one or more aspects of public policy development including agenda setting and policy formulation, implementation, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 331 | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 331 | Public Opinion | Formation, expression, and influence of individual and organized opinion on political institutions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 332 | American Political Parties | Development of the American party system. Party organization and functions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 333 | Interest Groups | Examines how minority, corporate, labor, farm, consumer, environmental, health, education and public interest groups, and single-issue movements influence government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 336 | Voters in America | Voting behavior and the attitudes, perceptions, and activities of the citizenry in the political process. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| POS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| POS | 340 | History of Political Philosophy I | Western political philosophers and their theories to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 341 | History of Political Philosophy II | Western political philosophers and their theories from the 17th to the 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H | |
| POS | 342 | Political Theory | Surveys ancient, modern, and contemporary political theorists and ideas in European and American contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU or SB | |
| POS | 346 | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| POS | 346 | Problems of Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 350 | Comparative Politics | Theoretical approaches and political institutions, such as parties, pressure groups, legislatures, and executives, from a cross-national perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 351 | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| POS | 351 | Democratization | Examines the consolidation of democracies in postauthoritarian and postcommunist settings (e.g., Latin America, Eastern Europe, Asia). | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 352 | European Democracies | Addresses questions such as, How has the relationship between European citizens and the democratic process changed in the post-WWII period? How do domestic political institutions influence this process? Explores different approaches to some of the most important questions facing the study of comparative and European politics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Minimum 25 hours. Credit is allowed for only POS 394 (European Pol Democracies), 498 (European Democracies), or POS 352 |
| POS | 353 | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |
| POS | 353 | Comparative Politics of the Middle East | Examines the historical, social, and economic context of contemporary Middle East politics; explores political dynamics of selected Middle Eastern regimes; and offers a comparative examination of key political trends and themes. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: POS 150; Credit is allowed for only POS 360 (Politics of the Middle East) or POS 353 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 354 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 356 | European Union | History and workings of EU member states, including single market, Euro, legal system, ethnonationalism, immigration, expansion, trade wars, and defense. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 357 | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 357 | South Asia Politics | Political culture and systems of South Asia examined through study of political writings, novels, and poetry. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 358 | Southeast Asia | Political background, governmental institutions, political dynamics, and developmental problems of Southeast Asian nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 359 | African Politics and Society | Comparative analysis of socioeconomic forces, political processes, government institutions, and political novels in Sub-Saharan Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 360 | World Politics | Theory and practice of statecraft as applied to selected issues, regions, or eras. Emphasis may vary with instructor, but cannot be repeated for credit. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: Minimum 25 hours; Credit is allowed for only POS 160 or POS 360 |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 361 | American Foreign Policy | United States in world affairs; foreign policy since World War I. Techniques in formulating American foreign policies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 362 | World Politics Theory | Theoretical examination of one or more aspects of international politics, e.g., foreign policy, negotiations, alliances, crises, wars, and international systems. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Credit is allowed for only POL 360, POS 160 or POL 160. |
| POS | 364 | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 364 | National Security, Intelligence, and Terrorism | Theoretical and empirical assessment of U.S. national security policy in the post-cold war era. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 367 | World Politics and Global Inequalities | Examines the topic of global inequality and the numerous challenges that arise from it, including perspectives and theories pertaining to third world development, the historical background to the political and economic relations between the wealthy countries of the world and the poorer countries, and policies and strategies designed to promote development and alleviate poverty. Studies some contemporary issues that are related to global inequality including ethics and third-world development, sweatshop labor, corporate responsibility, and the tension between globalization and the movement of people across sovereign borders. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 360 (Current Issues International Politics), (International Security), (Organizational Studies) or POS 367 |
| POS | 368 | Ethics and Human Rights | Explores issues of ethics, morality, and human rights in the global community. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 370 | Law and Society | Analyzes debates among social scientists and legal theorists concerning the relationship between law and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 370 | Law and Society | Analyzes debates among social scientists and legal theorists concerning the relationship between law and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| POS | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| POS | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| POS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | 401 | Political Statistics | Basic concepts in statistics as they facilitate the description, explanation, and prediction of social and political phenomena. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): POS 301 with C or better |
| POS | 401 | Political Statistics | Basic concepts in statistics as they facilitate the description, explanation, and prediction of social and political phenomena. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | CS | Prerequisite(s): POS 301 with C or better |
| POS | 410 | Governing American Cities | Reviews modern urban problems, their sources, and potential solutions, including structural and policy alternatives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| POS | 414 | Political Thought and Leadership | Research seminar in political values and leadership. Combines lecture, readings and guest lectures by leaders in business, public affairs and the media. Culminates in a substantial written research effort. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; HST 112 with C or better; Minimum 55 earned hours. Credit is allowed for only HST or POS 414 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 417 | Arizona Politics | Surveys the operations, problems, and policies of state and local governments in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: Minimum 25 hours; Credit is allowed for only POS 211, 216 or 417 |
| POS | 426 | Elements of Public Policy | Each section may cover one of the following topics: consumer protection, natural resources, criminal justice, environmental protection, science and technology, or theories of public policy. May be repeated for credit when topics vary. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 426 | Elements of Public Policy | Each section may cover one of the following topics: consumer protection, natural resources, criminal justice, environmental protection, science and technology, or theories of public policy. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 431 | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 431 | Campaigns and Elections | Examines campaigns from a multitude of perspectives including the politician, reporter, campaign strategist, and voter. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| POS | 434 | Media and Politics | Studies mass media and politics in the United States, e.g., media and elections, media and government. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| POS | 435 | Women and Politics | Focuses on the uniqueness of women in modern political systems and political thought. Emphasis may vary with instructor. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | |
| POS | 436 | Gender, Sexuality, Nation-States | Issues and problems related to the interface of gender, sexualities, nationalisms, and states in various world contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| POS | 437 | Women, Power, and Politics | The roles and treatment of women within various political contexts. Specific focus may vary with instructor. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| POS | 438 | Latino Politics | Examines contemporary political issues in the diverse Latino community. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| POS | 439 | Minority Group Politics in America | Role of minority groups in American politics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Prerequisite(s): minimum 45 hours |
| POS | 439 | Minority Group Politics in America | Role of minority groups in American politics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & C | Prerequisite(s): minimum 45 hours |
| POS | 442 | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 442 | American Political Thought | Political theories and movements from the colonial period to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | Prerequisite(s): minimum 45 hours |
| POS | 443 | Topics in Contemporary Political Theory | Major problems and theories in contemporary political thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU | |
| POS | 446 | Democracy | Issues and problems in democratic theory, e.g., the nature of democracy, majority rule, representation, equality, and the value of political participation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | HU | |
| POS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB 447, POS 447, or SBS 447 |
| POS | 451 | China, Japan, and the Koreas | Comparative analysis of the political modernization experiences of China, Japan, and the two Koreas, focusing on their differing reactions to the West. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 452 | China | Background of the Communist revolution, political processes, and developmental problems in China from a comparative perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 453 | Latin America | Political institutions, process, and developmental problems of South American states examined through comparative analysis, novels and poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 25 hours |
| POS | 454 | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 454 | Mexico | Politics, economy, institutions, and cultures in Mexico in historical and contemporary perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 456 | Latin American Cities | Urban studies of Latin American world cities, e.g., Mexico City, Santiago, emphasizing integration with U.S. cities, including Los Angeles, Phoenix. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 464 | Border Cities: Action Research on Globalization | Examines the effects of globalization on U.S.-Mexico border cities and towns with particular emphasis on Mexican border cities. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 465 | International Organization and Law | History, practical political significance, and future of international institutions, transnational regimes, and international law. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 467 | International Security | Examines issues affecting the international security of states and peoples, e.g., military, economic, technological, environmental, and demographic. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 467 | International Security | Examines issues affecting the international security of states and peoples, e.g., military, economic, technological, environmental, and demographic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| POS | 468 | Comparative Asian foreign Policies | Foreign policies of the Asian states, emphasizing their security relations and movements toward regionalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 470 | Law and the Political Order | Investigates concepts of justice, political rights, adjudication and legislation, legal ordering, constitutional law, law as an instrument of change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only POS 470, CMN 598 (Law and the Political Order), JHR 598 (Law and the Political Order) or MAS 598 (Law and the Political Order) |
| POS | 471 | Constitutional Law I | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; jurisdiction and organization of the federal courts; judicial review; separation of powers; federalism; the commerce clause; national taxing and spending power; state police power. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 471 | Constitutional Law I | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; jurisdiction and organization of the federal courts; judicial review; separation of powers; federalism; the commerce clause; national taxing and spending power; state police power. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 472 | Constitutional Law II | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; due process; equal protection of laws; individual rights; civil liberties. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 472 | Constitutional Law II | Development of the U.S. Constitution as reflected in decisions of the Supreme Court; due process; equal protection of laws; individual rights; civil liberties. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 473 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | GRD | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 482, JUS 473 or POS 473 |
| POS | 475 | Morality and Politics | Should morality play a role in politics? Machiavelli gives us one sort of answer, urging politicians to be dishonest, deceptive and even cruel. Kant disagrees, arguing instead that politicians should adhere to their personal morality over political calculations. Explores this question in two ways. First, looks more at the disagreement between great thinkers in the Western political tradition. Second, investigates contemporary political actors who bring moral concerns to the fore, including dirty politicians and extremist citizens (for example, radical animal rights activists, militant environmentalists or global poverty zealots). Seminar course that incorporates in-class discussion and writing, options-based grading and creative assignments. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only POS 394 (Morality and Politics) or POS 475 |
| POS | 475 | Morality and Politics | Should morality play a role in politics? Machiavelli gives us one sort of answer, urging politicians to be dishonest, deceptive and even cruel. Kant disagrees, arguing instead that politicians should adhere to their personal morality over political calculations. Explores this question in two ways. First, looks more at the disagreement between great thinkers in the Western political tradition. Second, investigates contemporary political actors who bring moral concerns to the fore, including dirty politicians and extremist citizens (for example, radical animal rights activists, militant environmentalists or global poverty zealots). Seminar course that incorporates in-class discussion and writing, options-based grading and creative assignments. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only POS 394 (Morality and Politics) or POS 475 |
| POS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| POS | 485 | Political Economy | Problems, policies, and possibilities of various political-economic systems and the interrelationship of capitalism, socialism, and democracy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 485 | Political Economy | Problems, policies, and possibilities of various political-economic systems and the interrelationship of capitalism, socialism, and democracy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Prerequisite(s): minimum 45 hours |
| POS | 486 | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| POS | 486 | International Political Economy | Contending approaches to historical and contemporary issues of international political economy, including global welfare, equality, ecology, and peace. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| POS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| POS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| POS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | L | |
| POS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | L | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| POS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| POS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 503 | Empirical Political Inquiry | Research methods and techniques of the discipline, emphasizing empirical foundations and analytic methods employed in subfields. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Political Science student |

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| POS | 527 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| POS | 530 | American Politics | Examines major debates in the study of American political processes and institutions. Covers parties, media, elections, public opinion, interest groups, and the three branches of government. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 540 | Ancient Political Theory | Surveys the historical and philosophical developments in political thinking from the ancient Greeks up to the Renaissance. The world studied predominantly is one of profound political conflict and change. Moves from the Greek cities to the edge of modern political developments. The movement encompasses the political transformation from city-states to empires to the establishment of an overarching Christian world order that balances secular and sacred power, only to be challenged if not foundationally shaken by Machiavelli and realism. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate Political Science major |
| POS | 541 | Modern Political Theory | Surveys the development of modern political thought from Machiavelli--through Hobbes, Locke, Hume, Rousseau, Burke, Kant, Montesquieu, Constant, Bentham, Mill, and Hegel--to Marx. Focuses on the primary writings of these thinkers as well as reading secondary literature. In addition to focusing on the distinctive contribution and relevance of individual thinkers, further explores certain recurring themes among which are the following: Are freedom and equality foes or friends? What allegiance do we owe the state and why? Do we have rights against the state? What is a just state? Is private property essential to individual liberty? Do laws enhance or threaten liberty? Is self-interest an adequate basis for political allegiance? Why should we pursue the common good, if at all? Are self-interest and the common good reconcilable? | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD major; Credit is allowed for only POS 541 or 591 (Modern Political Thought) |
| POS | 545 | Themes in Political Thought | Examines a particular theme or problem in political thought from both a historical and contemporary perspective. May be repeated with approval of the director of graduate studies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 550 | Comparative Politics | Surveys major approaches across topical areas such as revolutions, authoritarianism, policy processes, interest groups, and electoral politics. Focus varies with instructor. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 552 | Women and Politics | Serve as an introduction to the comparative study of women and politics. Not a course on feminist theory; instead focuses on questions such as: Does the descriptive representation of women guarantee their substantive representation? Which electoral rules favor the election of women? Do the negative effects of gender quotas outweigh their impressive ability to increase the number of women in office? Have the news media helped or harmed female candidacies? Once in power do women govern differently than men? Focuses on the obstacles that women face in obtaining positions of power. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 552 or 598 (Women and Politics) |
| POS | 560 | International Relations | Surveys major theoretical approaches and debates in international relations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 563 | Comparative Asian Security Policies | Analyzes domestic and international constraints, belief systems, and economic components in security decisions by major powers and Asian nations. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 570 | The Politics of Public Policy | Examines the political dimensions of public policymaking. Emphasizes major theoretical explanations of the policy process--particularly elements such as agenda setting, implementation, and policy change--rather than on the substance of particular policies. Focuses primarily on U.S. domestic policy, with some comparative reference to other developed democracies. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only POS 570 or 598 (Politics of Public Policy) |

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| POS | 571 | Science and Technology Policy | Provides an in-depth introduction to theoretical perspectives on the role and place of science in democratic societies and democratic governance. Emphasizes how the ideas, ideologies, and practices of science are integrated into the design and implementation of government decision making, as well as how science both shapes and is shaped by the political organization and ordering of society. Pursues such questions in the context of U.S. politics, comparatively between the U.S. and Europe, and in emerging regimes of international governance. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 501 or POS 571 |
| POS | 572 | Advanced Science and Technology Policy | Focuses on the role of knowledge and expertise in political and policy decision making. Particular emphasis is placed on the analysis of knowledge systems (formalized institutional approaches to the production, validation, and use of knowledge and expertise in policy decision making), their modes of failure, and the design of approaches that may be able to prevent, avoid, or reduce the frequency of such failures. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: HSD 501 or POS 571 with B or better. Credit is allowed for only HSD 502 or POS 572 |
| POS | 573 | Governing Emerging Technologies | Examines the governance of science and technology through a focus on emerging technologies whose potential consequences in society are apparent only in anticipation and whose manifestations are still being shaped by local, domestic, and international institutions. These emerging technologies include nanotechnologies, synthetic biology, and other technologies associated with genetic modification, and information and cognitive science and neuro-technologies. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PAF 550, HSD 503 or POS 573 |
| POS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 586 | International Political Economy | International political economy (IPE) focuses on the relationship between the pursuit of wealth and power during the development and evolution of the global political economy. Assigned readings take an analytical approach to the subject, drawing on methods and theories developed in political science, economics, history and sociology. In addition to an overview of the methods and theories employed in the study of IPE, also examines a variety of current empirical research programs in the subfield. This seminar should enable students to read the academic literature, conduct independent research in the subfield, and understand contemporary problems in the global political economy. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| POS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| POS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 601 | Advanced Experimental Research | Introduces experimental and quasi-experimental research designs in political research, including lab techniques and topics in the analysis of variance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |

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| POS | 603 | Polimetrics I | Introduces theory and practice of linear regression analysis. Provides skills to read, understand, and evaluate professional literature using regression analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 604 | Polimetrics II | Applies quantitative techniques to research topics producing publishable papers through exposure to time-series, logit and probit, and simultaneous equations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 606 | Qualitative and Textual Analysis | Method and theory for the analysis of qualitative materials, systematic approaches for case studies, content analysis, critical analysis of texts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 636 | Electoral Behavior | Introduces fundamental concepts of electoral behavior. Emphasizes presidential elections and examines why people vote and how their votes are determined. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 638 | Law and Politics | Emphasizes research into such topics as constitutional law, women and the law, American legal system, judicial process, and judicial selection. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 652 | Religion and Politics | Analyzes the complicated and often conflictual relationship among major religious faiths, religious activists, and the state in the 20th and 21st centuries. Cover topics: secularization theory and its problems; religion as a cultural or attitudinal variable in politics; the rationality of religion, organized religions and their activists; the bases for conflicts between religion and the state; religion's role in conflict; the terms of reconciliation and collaboration; the conditions under which religion is politicized and becomes the basis of a political movement or party; and the means by which organized religions and/or their adherents seek to maintain an influence in 20th- and 21st-century politics and society. Does not provide a survey of religion and politics for all major world religions, or other religions. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: MA or PhD student; Credit is allowed for only POS 652 or 598 (Religion and Politics) |
| POS | 664 | War, Peace, and Conflict Processes | Systematic analysis of the causes of war, the preconditions for peace, and approaches to the resolution of conflict. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| POS | 671 | HSD I: Human Dimensions of Science and Technology | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 601 or POS 671 |
| POS | 672 | HSD II: Science, Power and Politics | Interdisciplinary synthesis, theoretical foundations, and methods for humanistic and social science research on science and technology. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only HSD 602 or POS 672 |
| POS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| POS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| POS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Politics and Global Studies | 1 | | |
| POS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-15 | | |
| PPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 210 | Teaching Fitness Activities for K-12 Students | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 215 | Teaching Team Sports | Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 220 | Teaching Lifetime Activity K-12 | Participating in and teaching sequenced activities K-12. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PPE | 225 | Teaching Cooperative and Initiative Games | Participating in and teaching sequenced adventure-based activities. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | |
| PPE | 230 | Teaching Group Exercise | Introduces instructional strategies appropriate for the teaching of group exercise classes in secondary school settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Credit is allowed for only PPE 230 or 294 (Teaching Group Exercise) |
| PPE | 235 | Teaching Strength and Conditioning for Health | Fundamental principles, strategies and assessments of strength training and conditioning methodologies that are necessary to effectively operate in a school-based setting. Most secondary schools offer some form of strength training in a physical education setting, either as a stand-alone course or as part of a traditional class structure. Therefore, new physical education teachers should be well informed on the scientific rationale for the use of strength and conditioning programs in schools, and be able to design and implement these programs safely. Provides prospective physical education teachers with the knowledge and skills needed to safely and effectively operate in a school-based strength training setting, whether it is for physical education or sport performance. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Credit is allowed for only PPE 235 or PPE 294 (Teaching Strength Conditioning for Health) |
| PPE | 240 | Physical Activity | Recognizing individual interests and abilities, the program provides courses covering a wide variety of physical activities. We make an effort to address contemporary trends and student, faculty and staff interests. Offerings may include but are not limited to classes in the areas of: aquatics, artistic and social dance, fitness development, martial arts, mind/body, outdoor recreation, resistance training, sports and games. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | |
| PPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 300 | Introduction to Physical Education, Fitness and Sport | Introduces the fields of physical education, exercise science, sports medicine, and related fields. Discusses the history and trends of physical education as well as key concepts, programs, problems, and issues related to teaching physical education. Teaches essential background knowledge, better preparing for career success. The online (blackboard) component of this class provides practical experiential learning and assesses knowledge and comprehension of the key concepts presented in the course. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 60 hours; Junior or senior standing; Credit is allowed for only PPE 300 or 394 (Intro to Physical Education, Fitness & Sport) |
| PPE | 310 | Health Literacy: Creating Healthy and Active Schools | Signature course for elementary educators and special education educators in order to prepare future teachers with the knowledge, skills, and dispositions to teach healthy and active content knowledge and to create healthy and active school environments. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Co-requisites: One of the following: ECD/EED/SED/SPE /BLE 396/397/478/496, PPE 474/484 or TEL 484. Credit is allowed for only PPE 310 or HSC 310 |
| PPE | 315 | Pediatric Movement Sciences for Physical Educators | Provides a general overview of the functional anatomy of the human body as it relates to movement and the biomechanical principles underlying the execution of a given motor skill. Also examines the influence of physical growth and maturation on the development of motor skills. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 315 or 394 (Apld Pediatric Functional Anat) |
| PPE | 320 | Exercise Physiology Concepts for Physical Educators | Provides an introductory-level understanding of how the body responds prior to, during, and after participation in dynamic and static exercise. Examines the physiological basis of human movement, with emphasis on reviewing what exercise physiologists have learned about the diversity of physical activity, specifically in children. Although many physiological responses to activity are predictable, the magnitude and pattern of responses are unique depending on the age, gender, and previous experience of the individual. Also examines the role an active lifestyle plays in the overall health and well-being of school-aged children and adolescents. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: BIO 201; BIO 202; Credit is allowed for only PPE 320 or 394 (Pediatric Exercise Physical) |
| PPE | 335 | Movement and Physiology Principles of Children and Youth in Physical Activity Environments | Provides an introductory-level understanding of mechanical principles underlying human movement, the developmental patterns reflected in human movement birth through childhood and adolescence, basic principles of motor learning and the physiological basis of human movement. Covers how these principles directly affect the development of physical activity opportunities in in community-based sport and recreation settings with a specific eye toward the role an active lifestyle plays in the overall health and well-being of children and youth between the ages of 6 and 18. | N | LEL | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |

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| PPE | 340 | Understanding Children in Physical Activity Environments | Teaches students an understanding of elementary-aged children and how to implement a curriculum in a physical activity environment. Students learn effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective facilitators use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th grade youngsters. Prospective facilitators leave with requisite knowledge to implement a comprehensive physical activity program and the physical skills necessary for successful instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| PPE | 345 | Adolescents in Physical Activity Environments: Understanding and Practices | Gives an understanding of the changing scope of physical education in an era of education reform. Students learn about and teach a variety of curricular models and styles. Uses technology and assessments in authentic settings. Focuses on increasing the physical activity levels of secondary students during physical education and also promotes physical activity outside of the school setting. Covers strategies for advocating the importance of quality physical education to school and district personnel during a time when local administrators are pressured to allocate more time to core subject areas. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| PPE | 351 | Coaching of Children and Adolescents in Physical Activity Environments | Provide introductory-level understanding of the skills and knowledge needed to deliver positive sport experiences in various nonschool settings that lead to positive youth development. Effective use of these skills enhances the chance that children and youth come to programs that are fun, engaging, safe and positive challenges; while having clear rules, requiring personal responsibility and demanding respect for self and others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): junior or senior standing |
| PPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 396 | Clinical Experience in Physical Education: Elementary | Analyzes course content in an elementary/secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Program |
| PPE | 397 | Clinical Experience in Physical Education: Secondary | Analyzes course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Pre-requisite: Admission to the Professional Teacher Preparation Program |
| PPE | 430 | Analysis of Skill and Game Performance | Develops analytic skills for informal and formal assessment of student learning in physical activity settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 494, 598 (Analysis of Skill and Game Play Performance) or PPE 430 |
| PPE | 450 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only PPE 450 or PPE 550 |
| PPE | 451 | Innovative Programming in Elementary Physical Education | Provides students with an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students also become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Junior or senior standing; Credit is allowed for only PPE 451 or 551 |
| PPE | 455 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 460 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Program; Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 465 | Teaching Physical Activity Concepts | Focuses on teaching physical activity concepts in physical education settings and other settings such as fitness clubs or community health organizations. Analyzes and critiques state physical activity standards and national guidelines for promoting physical activity. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): minimum 45 hours. Credit is allowed for only PPE 465 or PPE 565 |
| PPE | 477 | Student Teaching in Physical Education Elementary K-6 | Provides an understanding of elementary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in kindergarten through 6th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

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| PPE | 478 | Student Teaching in Physical Education Secondary | Provides an understanding of secondary school physical education curriculum and how to implement the curriculum in a school environment. Effective teaching techniques, how to effectively manage students, and ways to improve the physical skill and activity level of students. Prospective teachers use authentic assessment techniques to assess and prescribe activities for improving motor skills in 7th- through 12th-grade youngsters. Prospective teachers leave with requisite knowledge to implement a comprehensive physical education program and the physical skills necessary for successful instruction. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| PPE | 480 | Professional Seminar for Physical Education | Methods of instruction, organization, and presentation of appropriate content in elementary and secondary physical education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to Professional Program |
| PPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Pre-requisite: Admission to Professional Program |
| PPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| PPE | 495 | Research on Teaching in Physical Education | Contemporary research and theory on teaching across fields with an emphasis on physical education pedagogy; provides a practical research experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| PPE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only COE 501 or ECD 503 or PPE 501 or SPE 501 or TEL 501 |
| PPE | 535 | Introduction to Sport Education | Introduces a grade 5-12 school physical education curriculum that focuses on providing more complete and more authentic sport experiences. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (Degree or non-degree) students; Credit is allowed for only PPE 494, 598 (Sport Education) or PPE 535 |
| PPE | 550 | Physical Education for the Elementary School | Scope and values of physical education in elementary schools. Methods, materials, and practices in teaching for primary through upper grades. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Students who have credit for PPE 450 may not enroll in PPE 550 |
| PPE | 551 | Innovative Programming in Elementary Physical Education | Provides an understanding of current trends and issues in elementary school physical education curriculum and how to implement the curriculum in a school environment. Students become familiar with a variety of best practices in curriculum and instruction specific to elementary children in physical activity settings. Emphasizes incorporating methods of effective teaching and activity organization, enhancing student learning, and effectively managing student behavior and the learning environment. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) students; Credit is allowed for only PPE 451 or 551 |
| PPE | 555 | Physical Education in the Secondary School | Current trends and theories such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and non-degree); Credit is allowed for only PPE 455 or PPE 555 |
| PPE | 560 | Adapted and Inclusive Physical Education | Teaching individuals with disabilities physical skills and activities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate students (Degree and Non-degree); Credit is allowed for only PPE 460 or PPE 560 |
| PPE | 565 | Teaching Physical Activity Concepts | Teaching physical activity concepts in PE settings. Analyzes and critiques state and national physical education standards. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 465 or 565 |
| PPE | 570 | Research on Teacher Education in Physical Education | Discusses current research on teacher education across fields, with an emphasis on physical education pedagogy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Graduate (degree or non-degree) student; Credit is allowed for only PPE 370 or 570 |
| PPE | 576 | Research on Curriculum in Physical Education | Discusses and applies research findings on curricular models for physical education and physical activity in school settings and beyond. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 593 | Applied Project | | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PPE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PRM | 120 | Leisure and the Quality of Life | Conceptual foundations for understanding the role of leisure in the quality of life. Social, historical, psychological, cultural, economic, and political foundations of play, recreation, and leisure. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | |
| PRM | 150 | Outdoor Pursuits | Theories and practical applications related to outdoor recreation pursuits. Interdisciplinary approach to wilderness issues and philosophies, culminating in an outdoor experience. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| PRM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 201 | Introduction to Community Sports | Examines the role of community sports at the local, national and international levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only CSM 201 or PRM 201 |
| PRM | 210 | Community Services and Professions. | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| PRM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |

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| PRM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| PRM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with C or better; minimum 2.50 GPA; minimum 45 hours. Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| PRM | 303 | Program Planning | Effective program planning in varied leisure delivery systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only CSM or PRM 303 |
| PRM | 304 | Recreation Planning and Facility Development | Surveys development and management of public, private, and commercial recreation areas and facilities with a focus on meeting program needs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Prerequisite(s): CRD 210(or NLM 210,PRM 210 or TDM 210) with C or better; MAT 142, C or better; Nonprofit Leadership & Management (or Parks & Recreation Management or Recreation & Tourism Management) major; minimum 2.50 cumulative GPA; minimum 45 hours |
| PRM | 310 | Volunteer Management | Studies volunteer administration practices integral to community organizations providing an introduction to management techniques including program organization, recruitment, interviewing, placement, supervision, recognition and evaluation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only NLM or PRM 310 |
| PRM | 315 | Community Recreation Systems | Explores and assesses community recreation delivery systems in the United States. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM120 (REC120) with C or better |
| PRM | 335 | Sports and Recreation for Youth Development | Provides an overview of definitions, statistics, theories and models, and types of programs surrounding youth development in relation to sports, recreation and leisure services. Addresses current trends related to youth development and collaborative partnerships in sports, recreation and leisure services at various levels within local, state, national and/or international systems. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 45 hours. Credit is allowed for only CSM 335 or PRM 335 |
| PRM | 340 | Outdoor Survival | Interdisciplinary approach to outdoor survival, including attitudes, psychological stress, physiological stress, preparation, hypothermia, navigation, flora, and wildlife. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| PRM | 364 | Foundations of Recreation Therapy | Overview of therapeutic recreation and its concepts, practices, service models, and settings. Explores the provision of recreation and treatment services for individuals with disabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB | Prerequisite(s): minimum 45 hours |
| PRM | 370 | Public Lands Management | Introduces outdoor recreation resource delivery systems; history of wilderness and outdoor recreation resources; the role of outdoor recreation in society; outdoor recreation agencies; related environmental issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): minimum 45 hours |
| PRM | 380 | Wilderness and Parks in America | Examines the American Conservation Movement and the relationships between the environment and recreation behavior. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | SB & H | |
| PRM | 384 | Child Life Practicum | Combines clinical field exposure with classroom instruction to maximize understanding and skill mastery. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3-12 | | Pre-requisite: PRM 364 with C or better; Admission to Child Life Certificate program |
| PRM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 400 | Intervention Techniques in Recreation Therapy | In-depth analysis of theoretical and philosophical approaches to therapeutic recreation practice with emphasis on various facilitation techniques used in therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 364 |
| PRM | 401 | Management of Parks and Recreation Services | Analyzes administrative function, structure, and policies. Successful application in administrative situations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CSM 305 (or PRM 304) with C or better; ENG 102 with C or better; MAT 142 or higher; CSM or PRM major; minimum 2.50 cumulative GPA; minimum 45 hours. Credit is allowed for only CSM 401 or PRM 401 |
| PRM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre- or corequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better if completed; Credit is allowed for only CSM 402 or NLM 402 or PRM 402 or TDM 402 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 and NLM, PRM or TDM 301 with C or better; Senior standing ; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| PRM | 406 | Program Design & Administration in Recreation Therapy | In-depth analysis of assessment, treatment planning, program implementation, documentation, and evaluation strategies employed in therapeutic recreation practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) with C or better: PRM 364, 400 (or PRM 455) |
| PRM | 413 | Leadership and Professional Development in Recreation Therapy | Examines therapeutic recreation leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 301, NLM 301, PRM 301, or TDM 301 with C or better; Pre- or corequisite(s): PRM 303 with C or better if completed |
| PRM | 422 | Entertainment, Protocol, and Programming for Special Events | In-depth analysis of the theoretical and philosophical aspects of special event management relative to talent and entertainment, protocol, etiquette, ethics, and programming. Requires some field work in event management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better |
| PRM | 423 | Special Event On-Site Operations | Expands on the concepts of event programming with in-depth examination of the theoretical and philosophical aspects of event operations, festival site design, and working with subcontractors and vendors. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 427 | Revenue Generation for Special Event Management | Examines theoretical and philosophical aspects of revenue generation relative to special events through in-depth exploration of budgeting, accounting, and sponsorship opportunities. Requires field work at an event. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |
| PRM | 450 | Leisure and Aging | Examines the factors influencing leisure among older adults, including policy issues and program service implications. Involves fieldwork. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 451 | Grant Writing | How to increase grant funding: creating fundable ideas, identifying sponsors, following guidelines, writing effectively, constructing budgets, responding to reviewers. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Credit is allowed for only NLM 451, 565 or PRM 451 |
| PRM | 454 | Human Services for At-Risk Youth | Overview of policy and programs affecting at-risk youth; examines risk factors and programmatic solutions to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 455 | Play in Child Life | In depth study of the techniques, principles and theories of play applied in clinical practice to enhance healing, growth and development with children and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CDE 232 with C or better. Pre- or corequisite(s): PRM 364 with C or better if completed |
| PRM | 460 | Assessment & Documentation in Recreation Therapy | In-depth study of the therapeutic recreation assessment process, including examination of interview techniques, assessment instruments, treatment planning, outcomes, evaluation, research, and documentation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 364 with C or better |
| PRM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| PRM | 470 | Environmental Communication | Park interpretation and environmental education that includes theories, principles and techniques. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours |
| PRM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| PRM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; Minimum 72 hours; Minimum 2.50 GPA; Non-SCRD majors |
| PRM | 485 | Sports Events | Expands the basic concepts of recreation, leisure or tourism program planning and leadership as they are specifically related to sport events management. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: minimum 45 hours. Credit is allowed for only CSM 485 or PRM 485 |
| PRM | 486 | Special Events Management | Principles of programming and managing special events for diverse populations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| PRM | 487 | Advanced Special Events Management | Advanced principles of special event sponsorship, public relations, marketing, contracting, risk management, and financial management. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 486 with C or better. Credit is allowed for only PRM 487 or RTM 487 |
| PRM | 488 | Event Marketing and Promotion | In-depth look at the influence and role of print and social media in special event management. Studies theory, strategies, and planning relative to experience marketing, including the use of promotions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: PRM 486 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PRM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PRM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| PRM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| PRM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| PRM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| PSB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 501 | Basic Principles of Applied Behavior Analysis | Fundamental principles of behavior including the history, theory, definitions, processes, concepts and characteristics of applied behavior analysis. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 510 | Basic Principles of Experimental Analysis of Behavior | Practical applications of research methodology to examine the effects and evaluate the efficacy of behavioral interventions. Provides an empirical science approach to designing, conducting and critically evaluating research involving applications of the experimental analysis of behavior in the use of graphic displays, single-case, ABAB, multiple baselines, changing criterion and alternating treatment designs. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |
| PSB | 511 | Advanced Research Methods | Focuses on research techniques such as time-series methods for single-case assessment, behavior measurement and the effectiveness of treatment interventions on behavior. Topics include conducting component and parametric analyses and use of experimental designs such as withdrawal, reversal, criterion and multiple baselines. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 520 | Ethical Issues and Professional Standards in Applied Behavior Analysis | Ethical standards and legal responsibilities including regulatory requirements and Arizona licensing statutes for ABA professionals who provide services to individuals with special needs and their families. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 530 | Behavioral Observation and Functional Assessment | Focuses on how to conduct behavioral observations and functional analyses using various methods for assessment and for data collection, organization and interpretation. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSB 501; PSB 510 |
| PSB | 540 | Development of Applied Behavioral Intervention Programs | Techniques for conducting task analyses; developing target intervention outcomes; determining alternative behaviors and environmental changes; use of behavior change procedures such as reinforcement, extinction, punishment, shaping, modeling, training and teaching. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSB 501, 510. Corequisite(s): PSB 530 |
| PSB | 563 | Basic Principles of Organizational Behavior Management | Overview and the use of Behavioral Systems Analysis (BSA) and Performance Management (PM) as they relate to the identification and modification of environmental variables that can affect and improve individual and organizational performance as a system. Basic techniques include analysis of antecedents, behavior and consequences and development of interventions to support the desired performance improvements and increase system productivity. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 2 | | |
| PSB | 573 | Advanced Principles of Learning and Analysis of Behavior | Provides an in-depth review of the philosophy and theory of behaviorism and its scientific application. Includes Skinner's conceptual framework plus fundamental elements of behavior change and procedures. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSB | 578 | Applied Behavior Analysis in Developmental Disorders | Provides an overview of the major theories and research related to the development of psychological disorders of childhood and adolescence including autism, attention deficit disorder, behavior disorders and intellectual disabilities. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MS Applied Behavior Analysis major |

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| PSB | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSB | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSB | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSB | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | |
| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PSY | 101 | Introduction to Psychology | Major areas of theory and research in psychology. Requires participation in department-sponsored research or an educationally equivalent alternative activity. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| PSY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): Freshman; maximum 25 earned hours |
| PSY | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 222 | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 222 | Human Sexual Behavior | Patterns of sexual behavior, including variations and deviations; theories of sexual attraction, sex differences, and sexual dysfunction and treatment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 230 | Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): PSY 101 (PGS 101) with C or better; MAT 119, 170, 242, 243, 251, 260, 261, 262, 270, 271, 272, 274, 290 or 291 with C or better |
| PSY | 231 | Honors Introduction to Statistics | Basic concepts in descriptive and inferential statistics, emphasizing applications to psychology for honors students. Lab includes learning to use statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | CS | Prerequisite(s): Barrett Honors student; MAT 119, 170, 242, 251 or higher with C or better; PSY 101 (PGS 101) with C or better |
| PSY | 244 | Introduction to Directed Child Study | Developmental theories and methods of social interaction with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 290 | Research Methods | Planning, execution, analysis, and reporting of experiments. Literature, procedures, and instruments in representative areas of psychological research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 4 | L or SG | Prerequisite(s): ENG 102, 105 or 108 with C or better; PSY 101 (PGS 101) with C or better; ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390 or STP 226 with C or better |
| PSY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | |
| PSY | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 304 | Effective Thinking | Understanding and improving intellectual and behavioral skills; information analysis, inference, logic, problem solving, and decision making. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): MAT 119, 170 or higher or PSY 230 with C or better |
| PSY | 306 | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 306 | Environmental Psychology | Concepts and research strategies in the study of behavior in interaction with physical environment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 315 | Personality Theory and Research | Definition and description of personality in terms of theoretical and methodological approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |

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| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 320 | Learning and Motivation | Principles of conditioning and motivation; approaches to learning, including acquisition of verbal materials, concepts, and motor skills; memory and transfer. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 323 | Sensation and Perception | Underlying processes of vision, audition, and the other senses. Integrates theory, research, and application. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 324 | Memory and Cognition | Processes underlying information storage and retrieval, including different kinds of memory, forgetting, depth of processing, and control processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 325 | Physiological Psychology | Relationships of physiological processes to behavior. Emphasizes nervous system functioning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better or two of the following courses with C or better: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 330 | Statistical Methods | Advanced application of statistics to psychology. Highly recommended for students interested in attending graduate school. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Prerequisite(s): ECN 221, JUS 302, POS 401, PSY 230, 231, QBA 221, SOC 390, 395 or STP 226 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 341 | Developmental Psychology | Analyzes behavior development in terms of psychological principles. Current research in human development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 344 | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | 344 | Directed Child Study | Theories and methods of intervention with preschool children and supervised practicum in the Child Study Laboratory. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): CDE 232, ECD 211 or PSY 341 (PGS 341) with C or better |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 350 | Social Psychology | Human social behavior, including such concepts as aggression, attraction, attribution, conformity, groups, helping, person perception, and persuasion. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Credit is allowed for only PSY 351 (PGS 351) or PSY 350 (PGS 350) |
| PSY | 351 | Honors Social Psychology | Critical analysis of human social behavior for honors students; topics include stereotyping, social influence, attraction, aggression, helping, groups, and attitudes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): Barrett Honors College student; PSY 101 (PGS 101); Credit is allowed for only PSY 350 (PGS 350) or PSY 351 (PGS 351) |
| PSY | 360 | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 360 | Cognitive Science | Examines cognition from the varied perspectives of philosophy, linguistics, psychology, computer science (artificial intelligence), and neuroscience. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 365 | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|------------------------------------------|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PSY | 365 | Community Psychology | Mental health and psychological well-being in the community, emphasizing current issues and related research. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 315 (PGS 315), PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 366 | Abnormal Psychology | Historical and current definitions, theory, and research concerning abnormal behavior. Major categories of psychopathology, including related treatment approaches. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 45 hours or PSY 290 with C or better |
| PSY | 369 | Biology of Human Sexuality | Biology of Human Sexuality | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; completed one semester of Biology |
| PSY | 370 | Interpersonal Relationships | Development of personal skills for competent functioning in interpersonal relationships across multiple social contexts. Principles of mental health adjustment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| PSY | 390 | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 390 | Experimental Psychology | Continuation of concepts in PSY 290, with emphasis on multifactor designs and programmatic sequence of experiments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; Minimum 30 hours |
| PSY | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395 |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | Liberal Arts and Sciences | Department of Psychology | 1-3 | | |
| PSY | 399 | Supervised Research | Experience within the context of current faculty research projects. Student is assigned responsibility depending on qualifications. | Y | RSC | Y | YGB | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| PSY | 414 | History of Psychology | Historical development of psychology from its philosophical beginnings to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 420 | Analysis of Behavior | Research, applications, and philosophy of the analysis and control of human behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 and 320 with C or better |
| PSY | 424 | Genetic Psychology | Introduces the concepts, methodologies, and findings of behavioral genetics for Psychology majors. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 425 | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | 425 | Biological Bases of Behavior | Critical study of physiological psychology, e.g., brain mechanisms underlying motivation, learning. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 325 with C or better |
| PSY | 426 | Neuroanatomy | Structure and function of mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): PSY 325 with C or better; Credit is allowed for only PSY 426 or 526 |
| PSY | 427 | Immunoneuropsychology: Research Foundation | Mind and the immune system's mutual influence (including neuroimmunologic diseases), with an emphasis on the molecular and cellular mechanisms involved. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): BIO 353, 462, 467, MIC 420, or PSY 325, 425 with C or better. Credit is allowed for only MIC 427 or PSY 427 |
| PSY | 430 | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | 430 | Industrial Psychology | Organizations and management systems: motivation and work performance; human factors in systems design and evaluation; personnel selection and testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): MGT 301 or PSY 101 (PGS 101) with C or better |
| PSY | 432 | Embodied Cognition | Do left-handers think differently from right-handers? Do paraplegics perceive the world differently from those who can walk? If you say about a potential date, "He leaves me cold," do you literally feel cold? And does a Botox treatment to alleviate frown lines makes it difficult to understand sentences about sadness? The surprising answer to all of these questions is YES! Embodied cognition proposes that thinking is based on neural and bodily systems of perception, action and emotion. Explores this claim through readings, discussions, debates and embodied interactions, and considers implications of embodied cognition across areas of psychology and applications in education. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better; Credit is allowed for only PSY 432 or PSY 498 (Embodied Cognition) or PSY 529 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------|
| PSY | 434 | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | 434 | Cognitive Psychology | Human organism as a processor of information, from perception to cognition. Abstract concepts, semantic memory, attention, and mental imagery. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L | Prerequisite(s): PSY 323 or 324 with C or better |
| PSY | 437 | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 437 | Human Factors | Emphasizes human factors in high-technology systems. Specific topics include systems development, systems analysis techniques, displays, and controls. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 290 with C or better |
| PSY | 438 | Human-Computer Interaction | Theories, methods, and findings concerning the usability of computer systems and the design of effective user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 439 | Training and Skill Acquisition | Theories, methods, and findings concerning the acquisition of skilled performance and the design of effective training systems. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 440 | Industrial/Organizational Psychology | Examines personnel selection, performance assessment, job and workplace design, job satisfaction, organizational behavior, management systems, and industrial safety. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 441 | Cognitive Development | Experimental and theoretical literature in child development and behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 443 | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | 443 | Abnormal Child Psychology | Covers the major disorders of childhood and adolescence (e.g., autism, hyperactivity, phobias, and delinquency), including cause, diagnosis, treatment, and prevention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 315 (PGS 315), 341, or PSY 366 (PGS 466) with C or better; PSY 290 with C or better |
| PSY | 444 | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 444 | Adolescent Psychology and Psychopathology | Advanced-level survey of normal adolescent psychological development and psychological disorders of this age period. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 446 | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 446 | Social Development | Discusses theory, research, and issues regarding social development. Topics may include formation of attachments, prosocial development, and gender-role development. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Prerequisite(s): PSY 341 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 447 | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 447 | Psychology of Aging | Analyzes loss, maintenance, and gain associated with cognitive and affective aging. Individual differences in coping with normative life transitions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 290 with C or better |
| PSY | 448 | Human Factors in Transportation | Examines human performance and human-machine design issues in aviation and ground transportation. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 449 | Human Factors in Sport | Examines how psychological principles can be applied to enhance the performance of athletes and coaches. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better |
| PSY | 451 | Stereotyping, Prejudice, and Discrimination | Critical investigation of the processes underlying, and the factors contributing to, stereotyping, prejudice, and discrimination. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | L | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 453 | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | 453 | Organizational Behavior | Surveys psychological theory and research as applied to the behavior of individuals in organizational settings. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better; Credit is allowed for only PSY 453 or 598 (Organizational Behavior) |
| PSY | 458 | Group Dynamics | Theories and methods of group leadership, group effectiveness, communication within groups, and relations between groups and individual members. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 350 (PGS 350) or PSY 351 (PGS 351) with C or better; PSY 290 with C or better |
| PSY | 461 | Interpersonal Influence | Principles and procedures that affect the process of social influence; consideration of attitudinal, compliance-inducing, and perceptual influences. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | SB | Prerequisite(s): PSY 290 with C or better; PSY 350 (PGS 350) or 351 with C or better |
| PSY | 462 | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 462 | Health Psychology | Contributions of psychology to health promotion and illness prevention, adaptation to acute and chronic illness, and to the healthcare system. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 465 | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |
| PSY | 465 | Psychology of Stress and Coping | Readings in theory and research in the area of stress and coping. Lecture, discussion, class presentations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 315 (PGS 315), 350 or 351 with C or better; PSY 290 with C or better |

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|---------|-------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|------------------------------|------------------------------------------|-------|-----------------|--------------------------------------------------------------------------------------------------------------------------|
| PSY | 468 | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 468 | Psychology and Law | Theories, research, and practice in psychology as related to law, including criminal, civil, domestic relations, and professional issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 470 | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 470 | Psychopharmacology | Basis of drug action at physiological and behavioral levels. Psychological and medical applications and limitations of drugs used in the treatment of mental illness. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 325 or one of the following: BIO 181 (or 188), 182 (or 187), 201, 202 |
| PSY | 471 | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 471 | Psychological Testing | Methods and theory of psychological testing; various types of psychological tests; consideration of ethical, social, and legal aspects of testing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 472 | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | 472 | Clinical Psychology | Clinical psychology as a science and profession. Historical development, methods of interviewing, assessment, and therapeutic intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 290 with C or better; PSY 366 (PGS 466) or 443 with C or better |
| PSY | 473 | Psychology and Politics of Child Maltreatment | Examines psychological literature on child maltreatment in the context of development. Explores interactions between professionals responding to maltreatment. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 101 (PGS 101) with C or better; PSY 230 (PGS 341) with C or better; PSY 290 with C or better |
| PSY | 475 | Multicultural Issues in Clinical Psychology | Discussion-based course that focuses on cross-cultural conceptions of mental illness, diagnosis and treatment approaches, and beliefs and practices of specific ethnocultural groups in the United States. Encourage students to critically think about diversity issues in clinical psychology, one's own attitudes, and culture and psychology more broadly. Students achieve these objectives through reading empirical articles and chapters; taking quizzes and exams; completing hands-on exercises, essays and other writing assignments; and actively participating in and facilitating class discussions. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Minimum 45 hours; Credit is allowed for only PSY 475 or 498 (Clinical Psychology: Multicultural Issues) |
| PSY | 477 | Applied Psychology Capstone Experience | Applied psychology from a systems perspective. Requires a report based on research and/or applied work as a culminating experience. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | 482 | Social Influence and Consumer Behavior | Discusses social influence principles, emphasizing strategies employed by professionals that affect consumer behavior. Analyzes consumer defenses against manipulations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): PSY 350 (PGS 350) with C or better |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | |
| PSY | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): PSY 290 with C or better |

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| PSY | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-6 | | Prerequisite(s): Barrett Honors student |
| PSY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-7 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | Prerequisite(s): PSY 290 with C or better |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-3 | | Prerequisite(s): PSY 399 |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-3 | | Prerequisite(s): PSY 399 |
| PSY | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | Prerequisite(s): PSY 399(PGS 399) with C or better |
| PSY | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 501 | Supervised Teaching | Experience in and examination of perspectives on teaching undergraduate psychology. | N | PRA | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 512 | Advanced Learning | Principles and theories of learning, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 515 | Quantitative Research Methodology and Statistics I | Introduces advanced experimental and quasi-experimental research design and analysis. Focuses on group-based design and univariate analysis of variance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): Psychology MS student |
| PSY | 516 | Quantitative Research Methodology and Statistics II | Advanced experimental and quasi-experimental research design and analysis. Focuses on principles underlying linear regression and related statistical techniques. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): PSY 515 with B or better; Credit is allowed for only PSY 516 or 598 (Psychological Methods II) |
| PSY | 526 | Neuroanatomy | Covers the structure and function of the mammalian brain, including sheep brain dissection. | N | LEL | N | OPT | Liberal Arts and Sciences | Department of Psychology | 4 | | Prerequisite(s): graduate; Credit is allowed for only PSY 426 or PSY 526 |
| PSY | 528 | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 528 | Sensation and Perception | Principles of sensory and perceptual processes, emphasizing research literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 529 | Embodied Cognition | Do left-handers think differently from right-handers? Do paraplegics perceive the world differently from those who can walk? If you say about a potential date, "He leaves me cold," do you literally feel cold? And does a Botox treatment to alleviate frown lines make it difficult to understand sentences about sadness? The surprising answer to all of these questions is YES! Embodied cognition proposes that thinking is based on neural and bodily systems of perception, action and emotion. Explores this claim through readings, discussions, debates and embodied interactions, and considers implications of embodied cognition across areas of psychology and applications in education. | N | SEM | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): graduate standing in Psychology; Credit is allowed for only PSY 432 or PSY 529 or PSY 591 (Embodied Cognition) |
| PSY | 530 | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 530 | Intermed Statistics | One-way and factorial designs, contrasts, post-hoc tests, probing of interactions, mixed designs, power, computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 531 | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | |
| PSY | 531 | Multiple Regression in Psychological Research | Multiple regression and correlation, hierarchical regression, interactions, curvilinear relationships, categorical predictors, ANOVA in regression, regression diagnostics, regression graphics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 532 | Analysis of Multivariate Data | Matrix algebra for multivariate procedures, component and factor analysis, canonical and discriminant analysis, classification, MANOVA, logistic regression, hierarchical linear model. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 533 | Structural Equation Modeling | Path analysis; exploratory and confirmatory factor analysis; recursive and nonrecursive latent variable models; mean and covariance structures; latent growth models. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 534 | Psychometric Methods | Theory and practice of psychological measurement using classical and modern test theories. Reliability assessment, test validation, test construction, test usage. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 535 | Cognitive Processes | Theoretical/empirical treatment of the human organism as a processor of information, including abstraction, memory structure, problem solving, and thinking. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 536 | Statistical Methods in Prevention Research | Statistical methods used in prevention research including epidemiological methods, logistic regression, program effect estimation, estimation, and mediation analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 537 | Longitudinal Growth Modeling | Growth modeling methodology to describe individual variation in development over time. Employs multilevel and structural equation modeling frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 538 | Advanced Structural Equation Modeling | Mean and covariance structure analysis. Includes multiple-group modeling, two-level hierarchical modeling, longitudinal growth modeling, analysis with categorical outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 539 | Multilevel Models for Psychological Research | Multilevel (i.e., hierarchical linear) modeling, as described by Raudenbush and Bryk (2002) and others. Covers analytic strategies for analyzing a variety of different nested data structures (e.g., couples data, clients nested within group therapy settings, children nested within classrooms, longitudinal data). Covers two- and three-level models for cross-sectional and longitudinal data and also addresses related topics such as centering and estimation. Students perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 531; Credit is allowed for only PSY 539 or 591 (Multilevel Modeling) |
| PSY | 540 | Missing Data Analysis | Covers analytic strategies for analyzing data with missing values, with a special emphasis on modern approaches for dealing with missing data, in particular maximum likelihood missing data handling and multiple imputation, maximum likelihood estimation and multiple imputation. Familiarizes students with missing data theory, traditional analysis methods (e.g., deleting incomplete cases, single imputation methods), maximum likelihood estimation, multiple imputation, planned missing data research designs, and the inclusion of auxiliary variables. Students learn how to perform and interpret the results of these models using a variety of statistical software packages. | N | LEC | N | GNA | Liberal Arts and Sciences | Department of Psychology | 3 | | Pre-requisite: PSY 532; Credit is allowed for only PSY 540 or 591 (Missing Data) |
| PSY | 541 | Research in Cognitive Development | Theoretical and empirical issues in the study of children's knowledge and cognitive processes. Comparison of research in Piagetian and other traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 542 | Social Development | Reviews and critiques major issues in the area of social development. Covers theory, research, and content. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 543 | Statistical Mediation Analysis | Specifically covers the substantive motivations for mediating variables and third-variable effects (interaction, confounder, covariate and mediator) in general. Mediation represents a chain such that one variable causes a mediating variable and the mediating variable causes a dependent variable. Describes the single mediator model in detail including assumptions, estimators and geometric interpretations. Once the details of the single mediator model are understood, analysis is extended to multiple mediator models, path analysis, and models with moderators and mediators. Discusses modern causal inference approaches for mediation along with latent variable models, multilevel models and special models for longitudinal data. Also describes research designs for investigating mediating variables. Students learn how to perform and interpret the results of analysis using a variety of statistical software packages. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 530; PSY 531; Credit is allowed for only PSY 543 or PSY 591 (Mediation) or PSY 591 (Statistical Mediation Analysis) |
| PSY | 550 | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 550 | Advanced Social Psychology | Theory and research concerning interpersonal perception, decision making, attitude formation and change, group processes, social motivation, and interaction processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 551 | Advanced Social Psychology | Continuation of PSY 550. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 554 | Item Response Theory | A collection of measurement models based on item response theory (IRT). The models express the probabilities of responses to test or questionnaire items as a function of latent respondent characteristics and item properties. IRT models form the basis for measurement in standardized educational testing, but generally are also now used in clinical, social and personality measurement in psychology, medicine and the social sciences. Assumptions underlying IRT models, methods of parameter estimation and fit evaluation. Also covers important applications of the models in computerized adaptive testing, the detection of measurement bias and multidimensional IRT. Uses several software tools useful in IRT modeling. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): PSY 534; Credit is allowed for only PSY 554 or 591 (Item Response Theory) |
| PSY | 555 | Experimental and Quasi-Experimental Designs for Research | Reviews research techniques. Analyzes lab and field research; applications to specific topics. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 560 | Advances in Theoretical Psychology | Covers new empirical and theoretical work in psychology with emphasis on its applicability. | N | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 561 | Methods in Applied Psychology | Methods of particular value in applied settings, including usability testing, prototyping, and use of computers in data collection and analysis. May be repeated for credit up to 9 hours. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 562 | Advanced Human Factors | In-depth study of the issues, methods, and findings in industrial and organizational psychology. | N | LEC | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 568 | Stress and the Brain | Covers the fundamentals of stress and brain interactions. Presents a foundation from a historical perspective, then the basics of an organism's stress response, including the activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. The stress response is highly conserved and allows organisms to respond and adapt to their environment. A highly effective and robust stress response facilitates adaptation and behavioral flexibility. However, a maladaptive stress response can produce detrimental outcomes. The ultimate goal is to understand the dynamic and reciprocal processes by which the stress response and brain interact to produce behavioral flexibility and resilience or detrimental outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 572 | Psychological Assessment | Theory and research on assessment of personality, psychopathology, and intelligence; construction of psychological assessment instruments. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 573 | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 573 | Psychopathology | Theory and research relating to the contribution of psychological, social, physiological, and genetic factors to the development and persistence of abnormal behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | Dean, New Interdisciplinary Arts and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 574 | Psychotherapy | Detailed survey of the theoretical and empirical literature relating to verbal psychotherapy. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 576 | Dynamical Systems in Psychology | Analyzes patterns of behavior change in psychological systems. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 578 | Developmental Psychopathology | Covers major theories and research related to the development of psychological disorders of childhood and adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 582 | Community Psychology | Community systems, intervention techniques, consultation models, history and current status of community mental health movement, and conceptualization of the roles of community psychologists in social justice interventions. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of Psychology | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| PSY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| PSY | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Department of Psychology | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | Department of Psychology | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PSY | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Department of Psychology | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUB | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman; maximum 25 hours |
| PUB | 501 | Introduction to Scholarly Publishing | Introduces the purpose, organization, and operation of scholarly publishing, including its history, societal role, and current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| PUB | 502 | Scholarly Editing | Publishing procedures, proofreading, and manuscript editing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 503 | Advanced Scholarly Editing | Advanced manuscript editing, acquisitions, developmental editing, and indexing of scholarly books, textbooks, and scholarly journals. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 510 | Research in Scholarly Publishing | Individual or group research projects on issues in scholarly publishing, including legal, economic, design, technological, and related topics. | N | REC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 580 | Practicum | | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUB | 592 | Research | | Y | LEC | Y | CNV | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUB | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | N | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| PUP | 190 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| PUP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| PUP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 200 | Cities in Cinema | Environmental, aesthetic, social, economic, political cultural, and other factors influencing global cities seen through films from around the world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU & H & G | |
| PUP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 301 | Introduction to Urban Planning | Theoretical and practical aspects of city planning. Interrelationships among physical planning, environment, government, and society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | |
| PUP | 361 | Planning Workshop I | Basic site planning and design techniques. Collection and analysis of information and basic planning research. Report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 with C or better; Minimum 45 hours |
| PUP | 363 | History of Planning | Historical overview of western urban and regional planning and planning theory, focusing on the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301 with C or better |
| PUP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 410 | Public Participation in Planning | Theory and practice of public participation in planning. Examines and critiques participation techniques and roles of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 412 | History of the City | The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Requires advanced critical thinking and evaluative skills appropriate to students at the junior or senior level as analytical essays and an in-depth research paper are required in addition to regular tests and quizzes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | (L or HU) & H | Prerequisite(s): minimum 45 hours; Credit is allowed for only MUD 598 (Great Cities) or PUP 412 |
| PUP | 420 | Theory of Urban Design | Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | HU | Pre-requisite: PUP 301 with C or better |
| PUP | 424 | Planning Methods | Methods for urban planning research. Emphasizes research design, quantitative and qualitative methods, survey research, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisite: PUP 301 with C or better |
| PUP | 425 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: PUP 301; Minimum 45 hours; Credit is allowed for only PUP 525 or 425 |
| PUP | 430 | Transportation Planning and the Environment | Overview of transportation planning from the perspective of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 432 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |

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| PUP | 433 | Zoning Ordinances, Subdivision Regulations, and Building Codes | Analyzes zoning ordinances, subdivision regulations, building codes, and other planning implementation techniques relative to local development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Senior student; PUP 301 with C or better |
| PUP | 434 | Economic Development Planning | Provides a broad overview of urban economic development planning in the U.S. This overview includes the role and goals of economic development planning in today's global information economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L or SB | Pre-requisite: PUP 301 with C or better |
| PUP | 436 | City Structure and Planning | Political structure and organization of government as it relates to planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 441 | Economics of Environmental Planning | Overview of environmental and ecological economics and how their concepts and tools are used in dealing with environmental planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better; Credit is allowed for only PUP 541 or PUP 441 |
| PUP | 442 | Environmental Planning | Environmental planning problems, including floodplains, water quality and quantity, solid and hazardous waste, air quality, landslides, and noise. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: PUP 301 with C or better |
| PUP | 444 | Preservation Planning | History, theory, and principles of historic preservation. Emphasizes legal framework and methods practiced. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students. Credit is allowed for only PUP 527 or PUP 444 |
| PUP | 445 | Women and Environments | Examines the role women play in shaping the built environment; ways built/natural forms affect women's lives. Focuses on contemporary U.S. examples. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | C | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 452 | Ethics and Theory in Planning | Ethics and theory of professional planning practice in urban and regional communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | L | Pre-requisite: PUP 301 with C or better |
| PUP | 462 | Planning Workshop II | Comprehensive planning. Synthesis of complex data- and community-based analyses. Advanced report writing and public presentation skills. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 4 | | Pre-requisites: PUP 301 and PUP 361 with C or better |
| PUP | 465 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| PUP | 481 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices, and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: reviewing basics of math, calculus and linear algebra; introducing optimization approaches, including linear programming, integer programming and heuristics; and applying these methods to structured problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: MAT 270 (or 271 or 272) with C or better; Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |
| PUP | 482 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others, to make connections among models, spatial information, and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: exposing a range of location analysis and modeling approaches; applying approaches in combination with GIS and optimization software; and carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 373 or GPH 481; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban Planning undergraduate student |
| PUP | 485 | International Field Studies | Organized field study, culture and language in specified international locations. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | G | Pre-requisite: Junior standing; Credit is allowed for only GCU 485 or GPH 485 or LAP 485 or POR 485 or PUP 485 or 585 |
| PUP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | | Prerequisite(s): Barrett Honors student |
| PUP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| PUP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | Pre-requisites: Junior, Senior, Post-Bacc Undergrad, Graduate or Post-Bacc Graduate including non-degree students |
| PUP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-7 | | |
| PUP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-3 | | |
| PUP | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 501 | Planning History and Theory | Comprehensive review of planning profession within a political, governmental, multicultural, and gender framework. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 505 | GeoDesign Principles | Systematic exploration and evaluation of alternative complex human-environmental systems using spatially and temporally explicit theories, data and methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): GIS 601 and 602, or PUP 576; Credit is allowed for only GIS 505 or PUP 505 |
| PUP | 515 | International Planning and Development | Introduces globalization, international development, international planning practices and policies, urbanization and urban and regional planning in developing nations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 520 | Planning Practice, Ethics and Processes | Reviews past and current theoretical developments related to social change perspectives, the role and ethics of planners. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) |
| PUP | 525 | Urban Housing Issues | Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 425 or 525 |
| PUP | 526 | Historic Preservation Planning Practice | In-depth study of practical applications of historic preservation theory and methods. Overview of the professional work of the preservation field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 527 | Preservation Planning | Explores the field of historic preservation. Overview of its historic development and the principles that guide its professional practice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student. Credit is allowed for only PUP 444 or 527 |
| PUP | 531 | Planning and Development Control Law | Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 535 | Water Law and Planning | In-depth study of legal materials providing substantive knowledge of water law, water management issues, and land use planning options. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 535 or GPH 535 |
| PUP | 541 | Economics of Environmental Planning | Application and limitations of economics in environmental planning and policy making in the United States and internationally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 441 or 541 |
| PUP | 542 | Environmental Administration and Planning | Environmental administration of policies and their relationship to environmental planning practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 544 | Urban Land Use Planning | Theory and methods of urban land use planning, including the rational planning process, comprehensive, functional, and neighborhood plans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only WST 547 or PUP 547 |
| PUP | 548 | Planning for Sustainable Communities | Theory and applications connecting sustainability sciences and practice to urban environmental planning. Sustainable urban development, restoration, and preservation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 550 | Transportation and the Environment | Examines transportation planning from the perspectives of land use planning, economic development, environmental planning, and social needs. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| PUP | 553 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |
| PUP | 561 | Urban Design Workshop | Workshop course focuses on applying knowledge and skills in a "real world" setting, developing meaningful planning and design proposals for existing urban areas. | N | STO | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 562 | Advanced Theory of Urban Design | Study of urban design practice and underlying social, political, and environmental issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 563 | The Politics of Urban Space and Design | Advanced seminar critically examines major intellectual traditions investigating urban form, the production of urban space, and socio-spatial practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 565 | Sustainable Urbanism | Examines the history, theory and practice of "sustainable urbanism," now defined by reform movements such as new urbanism, ecological urbanism, smart growth, and livable cities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only PUP 465 or 565 |
| PUP | 571 | Socio-Economic Impact Analysis | Theory, methods, and techniques of demographic and economic analysis utilized in urban planning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 573 | Survey Research and Multivariate Statistics | Methods of survey research design and primary data analysis for urban planning applications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and PUP 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 575 | Environmental Impact Assessment | Criteria and methods for compliance with environmental laws; develops skills and techniques needed to prepare environmental impact statements/assessments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 576 | GIS Workshop | GIS as a tool to address large, multifaceted problems. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GIS 515 or PUP 576 |
| PUP | 577 | Communication and Visualization Tools in Planning | Covers graphic and verbal skills required to effectively communicate planning information and ideas. Emphasizes digital graphics and other computer-based tools and presentation formats, focusing on applying visual strategies and tools most often used by planners to make a persuasive argument. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Pre-requisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 579 | Qualitative Research | Covers key qualitative skills and techniques that planners require, including research design and the understanding of validity and reliability issues, case study research approaches, qualitative data collection strategies, and strategies for analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2 | | Prerequisites: PUP 570 and 571 with C or better; Graduate student (degree seeking or nondegree seeking) |
| PUP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 581 | Optimization Fundamentals for Spatial Analysis | Covers the fundamentals of optimization for spatial analysis. Reviews elements of calculus, matrices and basic linear algebra. Introduces linear programming, integer programming and branch and bound, and heuristics. Provides the basics for use and application of GIScience and spatial analysis methods. Objectives include: (1) review basics of math, calculus and linear algebra; (2) introduce optimization approaches, including linear programming, integer programming and heuristics; and (3) apply these methods to structured problems. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only GIS 461, 561, PUP 481, 581, GCU 494 (Optimization Fundamentals) or 598 (Optimization Fundamentals) |

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| PUP | 582 | Location Analysis and Modeling | Provides a technical overview of location theory in the context of GIScience, focusing on analysis and modeling issues. Relies upon applications associated with emergency service planning, natural resource management, retail site selection, among others to make connections among models, spatial information and interpretation of findings. Explores utilization and implementation considerations using GIS. Objectives include: (1) exposure to a range of location analysis and modeling approaches; (2) ability to apply approaches in combination with GIS and optimization software; and (3) capability of carrying out an application-oriented study relying on acquired skills. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisites: GPH 581; Credit is allowed for only GPH 482, 582, PUP 482, 582, or 598 (Location Modeling) |
| PUP | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Urban/Environmntl Planning MUEP student |
| PUP | 585 | International Field Studies | Organized field study in specified international locations. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only GCU 485, GCU 586, GPH 485, GPH 585, LAP 485, LAP 585, POR 485, PUP 485 or PUP 585 |
| PUP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisite: Graduate student |
| PUP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-4 | | |
| PUP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Pre-requisites: Urban and Environmental Planning graduate student |
| PUP | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 642 | Urban and Regional Economic Analysis | Land use and locational impact of economic activity and the urban real property market. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 644 | Public Sector Planning | Urban fiscal problems and public goods provision in state and local governments. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | |
| PUP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUP | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | |
| PUP | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | |
| PUP | 701 | Urban Planning Colloquium | Presents and discusses new research findings and methods in urban planning. | N | SEM | Y | YGB | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 710 | Current Planning Theory and Practice | Explores and critically evaluates planning theories and approaches with the objective of articulating new ideas for planning research. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 718 | Econ Dev in Indian Country | Focuses on the unique legal, economic, and political issues confronting tribal governments in developing diversified reservation economies. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 2-3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking)Credit is allowed for only LAW 718 or PUP 718 |
| PUP | 724 | Planning Methods for Doctoral Students | Tools useful for urban planning research; emphasis on research design and survey methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| PUP | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| PUP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| PUP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Geographical Sciences and Urban Planning | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| QBA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Economics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| QBA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |
| QBA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-6 | | Prerequisite(s): Barrett Honors student |
| QBA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-7 | | |
| QBA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-3 | | |
| QBA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Students only (degree and non-degree seeking) |
| QBA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: Graduate Degree Seeking Students only |
| QBA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| QBA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | |
| QBA | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Economics | 1-12 | | Pre-requisites: W.P. Carey Graduate Degree Seeking Students only |
| QBA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Economics | 1-15 | | |
| QBA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | W.P. Carey School of Business | Department of Economics | 1 | | |
| QBA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Economics | 1-15 | | |
| RDG | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 291 | Children's Literature | Focuses on selecting and using children's literature and related nonprint media to support the elementary school curriculum. Covers the elements, genres and applications of children's literature as well as the resources available for elementary classroom teachers. Constructs criteria for the selection of trade books for educational and personal use. Also explores the role of digital media in children's literature. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | HU | |
| RDG | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 322 | Language Literacy 1 in Elementary Schools | Theoretical knowledge and pedagogical skills for implementing a high-quality reading program. Course objectives and topics are aligned to standards for reading and research from the International Reading Association (IRA), Arizona College and Career Ready Standards (ACCRS), Interstate Teacher Assessment and Support Consortium (InTASC) standards, and the National Reading Panel Report (2000). Focuses on emergent literacy, phonemic awareness, phonics, fluency, vocabulary and comprehension. Presents strategies and assessments to support students of a variety of ability levels and cultural backgrounds with a specific focus on the struggling readers and English language learners. For education majors only. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |

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| RDG | 323 | Literacy Processes in Content Areas | Principles and practices for planning subject matter units of instruction that explicitly address learning with texts across academic disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 413 | Language Literacy 2 in Elementary Schools | Applies effective practices for literacy instruction in authentic classroom settings. Prepares teacher candidates to plan and deliver balanced literacy approaches with diagnostic assessment strategies and adaptations to support second language learners and struggling readers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| RDG | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RDG | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| RDG | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| RDG | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| RDG | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| RDG | 505 | Developmental Reading | For classroom and special reading teachers. Specific professional skills in decoding, comprehension, and evaluation. Required for Special Reading Endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 507 | Content Area Literacy | Theory, teaching strategies, and practical application concerning learning from text across subject matter disciplines. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 508 | Essential Elements of Elementary Content Area Literacy (K-8) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 509 | Essential Elements of Secondary Content Area Literacy (6-12) | Presents theory, rationale, and teaching strategies concerning learning from oral, print, and electronic texts across subject-matter disciplines. Emphasizes practical application of content area literacy principles. Familiarizes participants with the literate lives of today's youth, facilitate participants' inquiry into strategies to motivate students in content learning, and provide strategies to improve students' comprehension and application of content material. Readings, online inquiries, and assignments focus on application of course content. Emphasizes implications of recent research and theory in content literacy and adolescent literacy. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 512 | Theoretical Foundations in Language and Literacy | Introduces theoretical lenses useful in understanding issues in language and literacy education and research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 520 | Essential Elements of Elementary Literacy (K-8) | Intended for practicing teachers, focuses on the development of a comprehensive approach to Reading and Writing Instruction K-8. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 525 | Emergent Literacy | Examines recent research on oral language and literacy development and effective strategies for teaching language and literacy in prekindergarten to grade 3, including phonemic awareness and alphabet instruction and beginning decoding. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 531 | Language and Literacy I | Focuses on the theoretical knowledge and pedagogical skills necessary to equip future teachers to plan and implement high-quality reading and writing instruction in a classroom setting. Course objectives and topics are aligned to standards for reading and research from the International Reading Association (IRA), Arizona College and Career Ready Standards (ACCRS), Interstate Teacher Assessment and Support Consortium (INTASC) standards, and the National Reading Panel Report (2000). Focuses on reading readiness, language development, phonemic awareness, phonics, fluency, vocabulary and comprehension. Presents strategies and assessments to support struggling readers as well as a variety of ability levels and cultural and linguistic backgrounds to include English language learners | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College graduate student; Credit is allowed for only RDG 531 or SPE 538 |
| RDG | 532 | Language and Literacy II | Builds on the theoretical knowledge and pedagogical skills presented in the previous course. Uses diagnostic assessments in the planning and implementation of intervention literacy lessons for struggling readers/writers in a classroom setting as part of the course case study assignment. Includes differentiated instructional and assessment strategies to address the needs of diverse learners to include English language learners. Also includes an emphasis on writing and composition to ensure future teachers have the knowledge necessary to teach all forms of writing in the elementary classroom. Includes an overview of the historical development of children's literature and the criteria necessary for analyzing and selecting all genres of quality children's literature. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College graduate student; Pre- or corequisite(s): RDG 531 |
| RDG | 550 | Practicum Experiences in Elementary and Secondary Reading | Practicum experience utilizing assessment and instructional techniques for classroom settings. See RDG 557 for State of Arizona reading endorsement. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 555 | Formal Measures of Literacy | Understanding the attributes of standardized tests and applying this information to analyze, select, and explore their use. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 556 | Assessment and Procedures in Elementary and Secondary Reading | Techniques for classroom and clinical reading/literacy assessment and instruction. Emphasizes continuous assessment. May be taken concurrently with RDG 550 or 557. Recommended for State of Arizona reading endorsement. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 557 | Advanced Elementary and Secondary Reading Practicum | Advanced practicum experience utilizing specialized reading and other assessment and instruction techniques for classroom and clinic settings. Lab sections. Recommended for State of Arizona reading endorsement. May be taken concurrently with RDG 556. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 563 | Children's Literature | Selects and uses children's literature and related nonprint media to support the elementary school curriculum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| RDG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RDG | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |

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| RDG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| RDG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) or Postbaccalaureate Undergraduate student |
| REA | 300 | Real Estate Analysis | Applies economic theory and analytical techniques to real estate markets. Topics include law, finance, appraisal, market analysis, investments, development. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: W.P. Carey BS or BA student, OR non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree or Graduate student. |
| REA | 380 | Real Estate Fundamentals | Real estate for the student/consumer with an emphasis on the applied aspects of each area of real estate specialization. Not open to Real Estate majors. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Minimum cumulative GPA of 2.00; Minimum 56 hours OR Non-degree student with minimum 2.0 ASU cum GPA, OR Graduate student |
| REA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| REA | 401 | Real Estate Appraisal | Factors affecting the value of real estate. Theory and practice of appraising and preparation of the appraisal report. Appraisal techniques. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 411 | Real Estate Law | Legal and ethical aspects of land ownerships, interests, transfer, finance development, and regulations of the real estate industry. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student. Credit is allowed for only LES or REA 411 |
| REA | 441 | Real Estate Land Development | Neighborhood and city growth. Municipal planning and zoning. Development of residential, commercial, industrial, and special purpose properties. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s) with C or better: FIN 300 or 302 or 303 or REA 380; W.P. Carey BA or BS Business major OR non-business student with minimum 56 hours and 2.50 ASU and business GPA OR non-degree graduate student |
| REA | 456 | Real Estate Investments | Analyzes investment decisions for various property types. Cash flow and rate of return analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Finance | 3 | | Prerequisite(s): W.P. Carey BA or BS major OR non-business major with FIN 300 (or FIN 302 or 303 or REA 380) with C or better; 2.50 ASU GPA; 2.50 ASU business GPA; minimum 56 hours |
| REA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | GNA | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey BS or BA student, OR Non-business students with minimum 56 earned hours and 2.5 ASU GPA OR Non-degree OR Graduate student. |
| REA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| REA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | W.P. Carey School of Business | Department of Finance | 1 | | |
| REA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| REA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 501 | Urban Economic and Real Estate Development Principles | Explores the basic principles of urban economics and their application to real estate decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| RED | 502 | Real Estate Valuation-Finance and Capital Markets | Addresses the concepts of valuation applied to real estate and teaches how to apply these principles. Intermediate-to advanced-level course in mortgage finance, and associated capital market innovations. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 691-Real Estate Fin/Analysis or RED 502 |
| RED | 503 | Real Estate Market Analysis | Focuses on market analysis and market data gathering methods, means, and techniques necessary in identifying market opportunities and developing specific market strategies for successful real estate development. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only RED 503 or 591 (Real Est Site Analys/Dsg) |
| RED | 504 | Real Estate Site Analysis, Master Planning and Design | Analyzes the physical characteristics of a property, including the site and physical area, legal, political, economic, and financial facts that impact the highest and best use of a property and what can be built upon the property. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 504 or 591 (Real Estate Develop Principles) |
| RED | 505 | Land Use Law and Public Entitlement Process | Covers a basic understanding of the legal and practical zoning and governmental land entitlement process. Examines the legal history, structure, and implications of zoning, as well as the fundamentals of "real life" situations that occur in the entitlement and real estate development field. Provides a broad overview of this process from a legal and development viewpoint, but is not intended to be a comprehensive analysis of all entitlement issues. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 505 or 591 (Mkt Segmentation/Analysis) |
| RED | 506 | Real Estate Law for Developers | Covers the nature of property and the legal system as it relates to purchase agreements, title, surveys, declarations of covenants, defining easements, and licenses among other related topics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 506 or 591 (Public Entitlement Process) |
| RED | 507 | Synthesis Project #1 Residential Development | Employs the students learning through application of developing a specific parcel of land. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 1 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for RED 507 or 591 (Mkt Segmentation/Analysis) |
| RED | 508 | Real Estate Engineering and Construction | Explores the basic principles of engineering and construction of real estate development projects. Reviews construction technologies within the framework of architectural design and engineering as well as construction means, methods, and systems. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: Graduate (degree or nondegree) student; Credit is allowed for only RED 508 or 598 (Compar Analys; in Fill Housing) |
| RED | 509 | Advanced Financial Analysis for Commercial Real Estate | Teaches more complex financial analysis of income-producing property, including various decision-making tools such as Monte Carlo, option pricing, assessing alternatives, and how to build these into financial models. Also teaches financial analysis of business structures to determine potential outcomes such as debt and equity structures, waterfalls, claw backs, and other business and ownership concepts. Emphasizes strategic alternatives, assessing risk and conversion events. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 509 or 691 (Contemp Issues Real Estate Dev) |
| RED | 510 | Real Estate Development Business and Project Management | Teaches management of real estate development companies and process. Students learn the various aspects of project management, financial management and project accounting, lending relations and managing loans and pay applications as well as dispute resolution and strategic partnerships. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student; Credit is allowed for only RED 510 or 598 (Income Analys; Comm/Retail) |
| RED | 511 | Design of the Built Environment | Teaches the built environment and how that applies to creation of places, market positioning, capturing value and the importance of good design to the business of real estate. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 511 or 691 (Real Estate Dev Project Mgmt) |
| RED | 512 | Real Estate Law for Developers | Teaches issues faced by developers such as various types of financing structures, including special districts, TIF and bond financing. Covers issues and process of raising capital and various forms of securing equity. Discusses private placement memorandums, limited liability companies, partnerships and public private partnerships. Students also learn about environmental law, income tax issues, negotiation, and alternative dispute resolution. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 512 or 691 (Adv Real Estate Finance/Analys) |
| RED | 513 | Advanced Real Estate Engineering, Construction Management and Sustainable D 2 | Covers various construction delivery methods, construction project management and scheduling, construction contracts, mechanics and materialmans liens, and pay applications. Students also learn about sustainability and the built environment. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Real Estate Dev. Project Mgmt) |
| RED | 514 | Synthesis Project #2 Income Property Development | Through application to a specific problem given by faculty, students work in teams to analyze and seek solutions to development of land for an income-producing property. Students investigate a specific parcel of land, performing due diligence, preparing a market and segmentation analysis, defining highest and best use(s), designing a solution, preparing residual land value analysis, defining a product offering, pricing points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 2 | | Pre-requisite: MRED student; Credit is allowed for only RED 513 or 691 (Adv Real Estate Finance/Analy) |

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| RED | 515 | Synthesis Project #3 Capstone Project Mixed-Use Property Development | Employs all that the students have learned through application to a specific problem given by faculty. Students work in a team to analyze and seek solutions to development of land for a complex, mixed-use project. Students investigate a specific parcel of land and are required to perform due diligence, prepare a market and segmentation analysis, define highest and best use(s), design a solution, prepare residual land value analysis, define a product offering, price points, building design, site planning and comparative valuation analysis. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Finance | 4 | | Pre-requisite: Master of Real Estate Development major; Credit is allowed for only RED 515 or 598 (Ret Analys; High Dens Mix Use) |
| RED | 520 | Real Estate Development Business and Project Management Internship | Integrates the knowledge and skills cultivated in the MRED program (real estate business management, creative problem solving, team building, critical analysis and thinking). Helps students secure relevant functional and industry experience by providing hands-on work experience across a variety of internship sites demonstrating the varied and changing demands and possibilities of work within the real estate industry. Uses internship experiences to analyze the shifting landscape of work and to assess potential employment environments and career paths. | N | PRA | N | YGB | W.P. Carey School of Business | Department of Finance | 3 | | Pre-requisite: MRED student |
| RED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-4 | | |
| RED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| RED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| RED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Finance | 1-12 | | |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 100 | Religions of the World | Introduces the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, and others. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only REL 100 or 200 |
| REL | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| REL | 111 | Introduction to Asia | Offers a basic introduction to the geography, history, cultures, states, and societies of South and Southeast Asia as well as China, Japan, and Korea. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST 111 or REL 111 |
| REL | 131 | Biblical Hebrew I | Offers an introduction to Biblical Hebrew, the language in which most of the books of the Hebrew Bible/Old Testament have been written. Provides the basic tools to understand and translate Biblical Hebrew texts. Covers the Hebrew alphabet, basic vocabulary, morphology and syntax. Students learn idiomatic expressions, basic literary techniques in narratives and poetry, as well as specificities of Semitic languages. Emphasizes a critical approach to the ancient text. Also introduces the evolution of the biblical text, from ancient manuscripts to contemporary editions and translations. Includes an introduction to the development of writing and to the evolution of Hebrew, from earliest inscriptions to its revival in modern Israel. The texts translated in class are situated in the history of Israel, but also in their Jewish and Christian cultural and religious contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Credit is allowed for only HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) |

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| REL | 132 | Biblical Hebrew II | Completes the study of basic Biblical Hebrew grammar and vocabulary (Futato's Beginning Biblical Hebrew, chapters 21-40). Prepares students to translate narrative and legal texts from Hebrew Bible. Students learn to use dictionaries, grammars, paradigms and critical editions of the biblical text. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 131 or HEB 194 (Biblical Hebrew I) with C or better; Credit is allowed for only HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) |
| REL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| REL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 200 | Exploring the World's Religions | Writing-intensive course introducing analytical skills necessary for understanding religious traditions. Beliefs, practices, and communities of several religious traditions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Pre-requisites: Maximum 75 hours; Credit is allowed for only REL 100 or 200 |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 201 | Religion and the Modern World | Introduces the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 202 | Religion and Popular Culture | Explores various intersecors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C | |
| REL | 202 | Religion and Popular Culture | Explores various intersecors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 202 | Religion and Popular Culture | Explores various intersecors between religion and the popular media, including music, news, advertising, the visual arts, literature, performance, and film. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & H | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 203 | Saints and Sinners: Explorations in Sacred Biography | Comparison of the role of biography across religions to examine the process of categorizing people as saints or sinners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | |
| REL | 205 | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 205 | Life, Sex and Death | Ways that religions have understood birth, sexuality, death, and the passing of generations. Examples from traditions throughout the world. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 207 | Ritual, Symbol, and Myth | Ritual, symbol, and myth as types of religious expression, with examples selected from the nonliterate religions of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 210 | Introduction to Judaism | Beliefs, ceremonies, festivals, and institutions of Judaism emphasizing the contemporary era. Assumes no previous knowledge about Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only JST 210 or REL 210 |
| REL | 211 | Jews and Judaism in America | Chronological analysis of Jews and Judaism in American history and letters. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | SB & H | Credit is allowed for only HST 211 or JST 211 or REL 211 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 225 | African American Religion | Introduces the history and development of the African American religious tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | |
| REL | 230 | Introduction to Jewish Civilization | Overview of Jewish civilization from antiquity to the present. Answers the following questions: Who are the Jews? What do Jews believe? How did Jews interact with non-Jews? What was the lasting contribution of Jews to the world? In the attempt to answer these questions, provides the skills of being a good college student. Presents Judaism as an evolving civilization with an overarching distinctive culture but with a variety of subcultures and ethnic diversity. Presents the Jewish civilization through literature, films, music, and internet resources, with an overview of its complexity and diversity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Credit is allowed for only HST, JST or REL 230 |
| REL | 231 | Biblical Hebrew III | Advanced study of Biblical Hebrew. Deepens understanding of the grammar and composition of the Hebrew Bible. Translates texts of different literary genres (narrative, legal, poetic, prophetic) and different periods. Introduces the basic principles of textual criticism and different approaches to interpret the texts of the Hebrew Bible. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 132 or HEB 194 (Biblical Hebrew II) with C or better; Credit is allowed for only HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) |
| REL | 232 | Biblical Hebrew IV | Addresses advanced topics in Biblical Hebrew grammar and interpretation. The first half of the semester is devoted to texts from the Hebrew Bible; the second half on extrabiblical texts written in ancient Hebrew (for example: Dead Sea Scrolls, Rabbinic texts, ancient Hebrew poetry). Topics and texts change annually. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: HEB, JST, REL 231 or HEB 294 (Biblical Hebrew III) with C or better; Credit is allowed for only HEB, JST, REL 232 or HEB 294 (Biblical Hebrew IV) |
| REL | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & G | Credit is allowed for only ASB, GCU, HST, POS, REL or SGS 240 |
| REL | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| REL | 260 | Introduction to Islam | Examines Islamic beliefs, ceremonies, festivals, and institutions. Assumes no prior knowledge about Islam. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 270 | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | 270 | Introduction to Christianity | Beliefs, ceremonies, festivals, and institutions of Christianity, emphasizing the contemporary era. Assumes no previous knowledge about Christianity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 282 | PreHispanic Native Am Wrldview | Surveys cosmological traditions of indigenous civilizations on the Pre-Columbian American continents | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 300 | The Future of Religions | Critical theorists of modern religious and secular beliefs argued that both theism and atheism have had their martyrs and tyrants. Nietzsche proclaimed "God" of the West dead, Marx unmasked religion as opium for the oppressed masses, and Freud analyzed religious future as an unconscious illusion. The future of secular progress has become equally suspect in the wake of the Holocaust, Hiroshima, the gulags, the killing fields of Cambodia, Rwanda. Globally motivated terror revealed itself as capable of religious as much as secular justifications. The future of faith and reason has become a doubly open theoretical and practical question in philosophy, religious studies, literary study, critical theory, cultural and gender studies, and all sciences. Applies theoretical and methodological tools to critically exam beliefs, practices, and communities and their role in both generating and transforming the ethical and spiritual discontents of the global age. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; Credit is allowed for only HON 394 (The Future of Religions), PHI 303 or REL 300 |
| REL | 301 | Comparative Mysticism | Comparative examination of Eastern and Western mystical traditions from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 307 | Approaches to Religion | Examines the intellectual history of academic study of religion through various theoretical approaches, major themes, and thinkers. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Religious Studies student; ENG 102, 105 or 108 with C or better; REL 207 with C or better |
| REL | 310 | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 310 | Western Religious Traditions | Religious traditions of Judaism, Christianity, and Islam, comparing their doctrinal, institutional, and ritual systems and social histories. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 311 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better. Credit is allowed for only HEB 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| REL | 312 | History and Memory of the Holocaust | In-depth study of the history of the genocide of Jews, the rise of modern antisemitism within the context of Nazi Germany, and the memory and memorialization of the Holocaust post 1945. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 369, 304 (Shoah: History, Memory, and Representation), 394 (History of the Holocaust) or REL 312 |
| REL | 313 | Anti-Semitism in the Media | By examination and discussion of various media, explores the phenomenon of modern anti-Semitism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better |
| REL | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | 314 | Jewish Philosophy | The history of Jewish philosophy from its origins in the Hebrew Scriptures to postmodern expressions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 390, JST 314, PHI 390 or REL 314 |
| REL | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | 315 | Hebrew Bible (Old Testament) | Nature, content, background, historical situation, and message of the books of the Hebrew Bible in English translation. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST or REL 315 |
| REL | 316 | Literary Readings of the Hebrew Bible | Literary analysis of two of the main genres of the Hebrew Bible: narrative art and poetry. Students learn the main literary conventions of biblical prose and poetry, and how these conventions are applied or subverted. Each class comprises the study of a literary aspect, close readings, and thematic discussions. Biblical texts are read only in translation. They are situated in the religious, literary and artistic traditions that have developed on their basis. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Prerequisite(s): minimum 45 hours. Credit is allowed for only ENG 316, HEB 316, JST 316, REL 316 or HEB 394 (Literary Readings of the Bible) |
| REL | 317 | Introduction to Rabbinic Judaism | Historical analysis of the thought, literature, and institutions of rabbinic Judaism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 317 or REL 317 |
| REL | 318 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 319 | Religion, Violence and America | In-depth study of ways in which religion and violence have shaped American history, culture and identity. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 319 or 394 (Religion, Violence & America) |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 320 | American Religious Traditions | Examines the formation, development, and interaction of major American religious traditions (indigenous, African American, Asian American, and Euro-American). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 321 | Religion in America | History of religion in America with attention to issues of historiography, pluralism, gender, race, ethnicity, politics, and social reform. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & C & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 323 | African American Religion: A Biographical Approach | Examines the experiences, motivations, and contributions of a number of figures associated with African American religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 324 | Spirituals and the Blues | Multidisciplinary exploration of the African American religious and musical response to the North American diaspora experience. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 326 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only TCL 328 or REL 326 |
| REL | 330 | Native American Worldviews | Presents worldviews through the art, architecture, writing, mythology, ritual and folklore of tribes in Native America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & C | Prerequisite(s): minimum 24 hours; ENG 102, 105, or 108 with C or better |
| REL | 331 | History of Native American Religions | Explores the role of religion in Native American history, including missionization; adaptation; and prophetic, messianic and religious revitalization movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & C & H | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 24 hours |
| REL | 332 | South American Indian Religions | Introduces the sacred stories, ceremonies, and beliefs of Native South American peoples in their historical contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 381 or REL 332 |
| REL | 338 | The Daoist Bible: Daode jing | At 5,000 words, the Daode Jing (Tao-te ching) is arguably the shortest religious book in the world. It is also the most widely translated, after the Christian Bible. Introduces the wisdom of the Old Boy, Laozi himself, and to some of the startlingly wide variety in which his short, gnomic utterances have been interpreted. No knowledge of Chinese required; all readings and lectures in English. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101, 105 or 107 with C or better; Credit is allowed for only CHI 338, 394 (Daoist Bible: The Dao De Jing) or REL 338 |
| REL | 343 | Daoism | Introduces the history, doctrines, and practices of Taoism from the mid-second century CE up to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only CHI or REL 343 |
| REL | 344 | Religion and Values in Japanese Life | Japanese values expressed in the life and annual cycles of the family, local and national identities, and popular culture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 345 | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 345 | Asian Religious Traditions | Introduces the major concepts of religious beliefs, rituals, and practices in Hinduism and Buddhism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 346 | Chinese Religions | Examines the history and practices of Chinese religions with particular attention to culture, society, and history. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 347 | Peace and Conflict in India | In-depth analysis of major Indian religious traditions in historical and contemporary context, with attention to theologies, textual genres, doctrines, rituals, political and cultural expressions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 24 hours; Credit is allowed for only REL 347 or REL 394 (Religions of India) |

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| REL | 348 | Religion and Culture in Southeast Asia | In-depth study of the religious diversity of Southeast Asia including Hinduism, Buddhism, Islam, Christianity, spirit cults and ancestral religions. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 24 hours; Credit is allowed for only REL 294 (Southeast Asia Global Crossroads) or REL 348 |
| REL | 350 | Hinduism | Studies diverse forms of Hinduism through its institutions, literature, folklore, art, and architecture. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 351 | Buddhism | Doctrines, practices, and institutions of the Buddhist religion, emphasizing its role in the history and culture of Asian societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 352 | Modern Buddhism | Focuses on modern issues related to Buddhism with special attention to colonialism, nationalism, the development of the nation-state and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 352 or 394 (Modern Buddhism) |
| REL | 353 | Folk Religions of Korea | Introduces forms of folk religions in Korea: shamanism, village rituals, ancestor-worship, fortune-telling, geomancy, and folk elements in major traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 353 or REL 353 |
| REL | 354 | Religious Traditions of Korea | Examines major religious traditions of Korea: Buddhism; Christianity; Neo-Confucianism; indigenous practices and their development through political, cultural, and social frameworks. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only KOR 354 or REL 354 |
| REL | 355 | Japanese Cities and Cultures to 1800 | Relations among ideas and literary, visual, and performing arts of the ancient aristocracy, medieval samurai, and early modern townspeople. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 356 | Buddhism in America | Examines diverse Buddhist traditions in the U.S. among Asian-American communities and converts to this religion. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 357 | Theravada Buddhism in South and Southeast Asia | Examines Theravada Buddhist institutions, practices, and communities in ancient and contemporary south and southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 360 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| REL | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| REL | 362 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| REL | 363 | Islam and World Affairs | Advanced examination of complex trends to construct the roles of Islam as a belief, its institutions, leaders and ordinary believers in contemporary world affairs. Studies different developments, including the rise of (political Islam) fundamentalism, to subsequent changes in the Muslim world, challenges Muslims face, and domestic and international conflicts. Challenges students to reconceptualize and broaden their understanding of the powerful presence of religion in this era of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours. Credit is allowed for only AFR 373 (or AFS 373) or REL 363 |
| REL | 364 | Islam in Eurasia and Central Asia | Examines the changing role of Islam in Eurasia and Central Asia through history and interprets current transformations in the region. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only REL 364 or 394 (Islam in Eurasia & Central Asia) |
| REL | 365 | Islamic Civilization | Global historical survey of Islamic cultures and societies up to the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105, or 108 with C or better |
| REL | 366 | Islam in the Modern World | Examines the worldwide transformations of Islamic religion, cultures, and societies in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 369 | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| REL | 369 | Women in Islam | Examines the roles women have played through Islamic history (Middle East) and the changing discourse on gender identity. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 371 | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU | |
| REL | 371 | New Testament | Origins and literature of early Christian communities; historical investigations of the types of oral and written tradition in the New Testament. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 372 | Formation of the Christian Tradition | Origins, development, and expansion of Christianity; major themes and tensions from the New Testament world to the beginning of the Middle Ages. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 373 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: Minimum 24 hours; ENG 102, 105 or 108 with C or better or WST 100 or WST 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| REL | 374 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | 374 | Witchcraft and Heresy in Europe | Background, origins, and development of the Inquisition; persecution of women and marginal groups. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & H | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours. Credit is allowed for only HST 361 or REL 374 |
| REL | 375 | Lost Scriptures, Lost Christianities | Wide diversity of early Christianity and its suppressed and lost texts, which have been found in modern times. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 376 | Virgin Mary in History, Film, and Culture | Introduces formation and development of cult of the Virgin Mary; analyzes transformations of Mariology within historical, cinematic, and cultural contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS 376 or REL 376 |
| REL | 377 | Religion in Russia | Examines the history of the various religious traditions of Russia and the former USSR from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only HST 371 or REL 377 |
| REL | 378 | Religion, War and Peace | In-depth study of the religious, political and ethical dimensions of violence and war. Compares perspectives of Christian, Jewish and Islamic traditions as well as secular viewpoints. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only POS 378, REL 378 or 394 (Religion, War and Peace) |
| REL | 379 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only REL 379 or SGS 343 |
| REL | 380 | Theology of Terror | Historical background, theological foundations, and consequences of violent Islamist movements. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or HU | |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | |
| REL | 381 | Religion and Moral Issues | Manner in which human religiousness relates to social concerns, e.g., sexuality, the environment, bioethical issues, and violence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | |
| REL | 382 | Magick, Religion and Science | Relationship and conflict among magic, religion and science in the West from antiquity to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L or HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 384 | The Bible and Archaeological Discoveries | Studies the Bible alongside the stories that architecture, pottery, metalwork, sculpture, tombs, and paintings of the ancient Near East have to tell. May be repeated for credit. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST 384 or REL 384 |
| REL | 385 | Contemporary Western Religious Thought | Introduces contemporary Jewish and Christian thought. Topics include religion and politics, problem of evil, interpretations of God, and feminist theology. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 386 | America and the Holocaust | Analyzes the historical and sociopolitical factors that shaped U.S. policy decisions regarding Germany's assault on Europe's Jews. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU or SB | |
| REL | 387 | Religion and Conflict: Theories and Cases | In-depth study of religion and conflict across multiple traditions and regions. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | (L or HU) & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 24 hours; Credit is allowed for only REL 387 or 394 (Religion and Conflict: Theories and Cases) |
| REL | 388 | Religion, Ethics, and International Politics | Religious and ethical dimensions of international politics. Addresses historical and contemporary ideas, movements, issues and events. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only POS or REL 388 |

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| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| REL | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| REL | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | 391 | Historical Perspectives on Philosophy and Religion | Comprehensive, advanced study of central concepts in the philosophy of religion in the history of Western philosophy. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: ENG 102, 105 or ENG 108 with C or better; Minimum 30 hours; Credit is allowed for only HST 357 or PHI 391 or REL 391 |
| REL | 393 | Religion and Sexuality | Examines what issues are involved in incorporating sexuality into religion and how/why religious traditions seek to control sexuality. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 395 | Religion and Psychology | Examines religious experience from various psychological viewpoints and explores the relationship between religion and psychology in theory and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102, ENG 105 or ENG 108 with C or better; PSY 101 (PGS 101) with C or better. Credit is allowed for only PSY 395 (PGS 395) or REL 395 |
| REL | 396 | Women in the Bible | Uses feminist criticism to reconstruct the remarkable women who stand in the shadow of the patriarchy in the bible. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only JST or REL 396 |
| REL | 401 | Sacred Scriptures and Social Choices | Examines relationships among contemporary moral issues and the sacred scriptures to support choices at individual, group, and public levels. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Credit is allowed for only IAS 401, MAS 598 (Sacred Scriptures & Social Choices) or REL 401 |
| REL | 405 | Problems in Religious Studies | Selected topics in religious studies; involves students in research interests of instructor. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: REL 307 with C or better; Religious Studies major |
| REL | 406 | Religious Studies Capstone I | Develops skills necessary for conducting and presenting in-depth research in the field of religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | Prerequisite(s): REL 307 with C or better; Religious Studies major; senior standing |
| REL | 407 | Religious Studies Capstone II | Uses previously developed research to produce original research project in religious studies. | N | SEM | N | GNA | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 2 | | Prerequisite(s): REL 406 |
| REL | 410 | Judaism in Modern Times | Variety of expressions of Judaism and Jewishness in the modern period. Topics may include American Judaism or religious responses to the Holocaust. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 411 | Judaism and the Beginnings of Christianity | Studies the beginnings of Christianity in relation to Judaism: their common context, the process of their distinction and their mutual influence. Through a historical and thematic approach, explores the parallel construction of Jewish and Christian identities. Combines readings from primary sources (Hellenistic Judaism, Qumran, New Testament, Early Christianity, Rabbinic Judaism) and up-to-date scholarly literature. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 101 or 105 or 107 or 108 or HST 100 or 102 or REL 100 or SLC 142 or 202 with C or better; Credit is allowed for only HEB/UST/REL 411 or HEB 394 (Judaism and the Origins of Christianity) or HEB 494 (Judeo-Hellenistic Literature) |
| REL | 420 | Religion in American Life and Thought | Influence of religion on American society, culture, and ideas; the distinctive character of religion in America. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU | |
| REL | 427 | American Religious Thought | Thought of representative American religious thinkers, e.g., Jonathon Edwards, William Ellery Channing, Horace Bushnell, and Reinhold Niebuhr. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 430 | Shamans and Mesoamerica | Analyzes process of religious hybridization in Mesoamerica; examines symbolic interpretations of Amerindian religious practice and cosmological concepts of Mesoamerican priests. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 460 | Studies in Islamic Religion | Issues in the interpretation and understanding of Islamic texts, history, society, culture, and rituals. May be repeated for credit when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & G | |
| REL | 461 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| REL | 470 | Religion in the Middle Ages | Religious aspects of medieval life and thought; variety of forms of dissent, heresy, and reform movements from the 4th to 13th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 471 | Reformation and Modern Christianity | Protestant reformation to contemporary Christian movements; includes factors in the dissolution of the Medieval Christian synthesis, variety of reform movements and reformation patterns, Catholic counter-reform measures, formation of liberal theology, ecumenical movement, and the World Council of Churches. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | HU & H | |
| REL | 480 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| REL | 482 | Religion, Violence, and Conflict Resolution | Focuses on the ambiguous, often confounding role of religion in local and global conflict and the pursuit of peace. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only JUS 473, POS 473 or REL 482 |
| REL | 483 | Religion and Science | Investigates the correlation between science and religion as an interdisciplinary study from a historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | Pre-requisite: Minimum CUM GPA of 2.00 |
| REL | 486 | Holocaust on Film | Examines how motion pictures recorded actual holocaust events and have depicted them since World War II. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; FMS 100 with C or better. Credit is allowed for only FMS 486 or REL 486 |
| REL | 487 | Religion and Film | Uses a transdisciplinary approach to explore cinematic representations of religious institutions, belief, and practice. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | |
| REL | 490 | Senior Thesis | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | |
| REL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | L | Prerequisite(s): Barrett Honors student |
| REL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | |
| REL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| REL | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-6 | | Prerequisite(s): Barrett Honors student |
| REL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-7 | | |
| REL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| REL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-3 | | |
| REL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| REL | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 501 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on classical texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 502 | Research Methods in Religious Studies | Explores the major themes and methods in the study of religion, with primary focus on contemporary texts. | N | SEM | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 585 | Philosophical and Spiritual Issues in Death and Dying | From Plato to Maimonides to Heidegger to Kubler-Ross, scholars, clinicians, and spiritual writers have recognized that attitudes about death and dying contribute to understandings of human existence. Recalling the ancient Socratic, biblical, and other spiritual traditions of the cura animarum (care for and cure of the soul) and joining contemporary post/secular conversations relevant to integration of body-mind-spirit, this course introduces basic concepts and practices of care ethics and spirituality. Focuses on relations among existential (ontological), therapeutic (psychosomatic), and spiritual (religious) dimensions of care. Theoretically, the course is inter-faith in approach, holistic in scope, and specialized in content. Practically, students examine real-life issues in care ethics and spirituality from multiple perspectives. | N | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3-9 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only MAS, PHI 550 or REL 585 |
| REL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| REL | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |

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| REL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| REL | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 603 | Teaching World Religions | Seminar designed to prepare participants to teach a course similar to ASU's REL 100. | N | LEC | N | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 3 | | Pre-requisites: Phd or Masters student in Religious Studies |
| REL | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | |
| REL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| REL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| REL | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1 | | |
| REL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Historical, Philosophical & Religious Studies, Sch | 1-15 | | |
| ROM | 101 | Elementary Romanian | Basic grammar with intensive drills in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 201 | Intermediate Romanian | Continuation of ROM 101. Intensive drill of fundamentals in class and lab directed toward conversational fluency. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| ROM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| ROM | 313 | Romanian Composition and Conversation | Develops skills in written Romanian and correct oral expression. Must be taken in sequence with ROM 314. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 201 |
| ROM | 314 | Romanian Composition and Conversation | Continuation of ROM 313. Develops skills in written Romanian and correct oral expression. Must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ROM 313 |
| ROM | 411 | Advanced Spoken and Written Romanian I | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314 with C or better |
| ROM | 412 | Advanced Spoken and Written Romanian II | Improvement of spoken and composition skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ROM 101, 201, 313, 314, & ROM 411 with C or better |
| ROM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| ROM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| ROM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ROM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| ROM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 101 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 102 | Elementary Russian | Structural grammar and basic vocabulary. Introduces and reinforces aural/oral reading and writing skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| RUS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: Freshman standing; Maximum 25 hours |
| RUS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 201 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 202 | Intermediate Russian | Systematic review of grammar. Develops vocabulary through reading and writing. Drill in aural/oral skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| RUS | 211 | Basic Russian Conversation | Intensive aural/oral drill to supplement reading and grammatical skills acquired in RUS 101, 102, 201, and 202. Required of Russian majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 212 | Basic Russian Conversation | See RUS 211. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | |
| RUS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 311 | Russian Composition and Conversation | Develops writing ability and oral expression. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 312 | Russian Composition and Conversation | See RUS 311. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 202 with C or better |
| RUS | 321 | Foundations of Russian Literature | An in-depth study from Early Kievan religious writings and the medieval epic "The Lay of Igor's Host", to folklore and 18th Century literary movements in prose, poetry and drama. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| RUS | 322 | Scandals and Scoundrels: The Nineteenth-Century Russian Novel | An in-depth study of the Golden Age of Russian literature, including novels of Pushkin, Lermontov, Gogol, Khvoshchinskaia, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |

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| RUS | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskaja, and other writers. Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105 or 108; Credit is allowed for only RUS or SLC 323 |
| RUS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 411 | Advanced Composition and Conversation I | Improves aural discrimination and self-expression in oral and written skills, emphasizing vocabulary building. Subject materials drawn from current post-Soviet-Russian publications. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 412 | Advanced Composition and Conversation II | See RUS 411. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: RUS 312 with C or better |
| RUS | 421 | Pushkin | Pushkin's poetry, plays, and prose fiction, including Eugene Onegin, The Little Tragedies, Tales of Belkin, Queen of Spades and The Captain's Daughter. Taught in English. Does not satisfy the Liberal Arts and Sciences language requirement for BA degree. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | |
| RUS | 423 | Dostoevsky and Tolstoy | An in-depth study of Dostoevsky's and Tolstoy's major works, including "Crime and Punishment", "Brothers Karamazov", and "Anna Karenina". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| RUS | 424 | Tolstoy and War and Peace in Russian Literature and Cinema | In English, course includes Tolstoy's War and Peace, the Sebastopol Tales, and Hadji Murad; Babel's Red Cavalry (Russian Civil War); and classic films of War and Peace, World War II, and the war in the Caucasus. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| RUS | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| RUS | 430 | Russian Short Story | Detailed study of representative works of the Russian short story genre. Includes authors from both Imperial and Soviet Russia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: RUS 312 with C or better |
| RUS | 439 | Art in Exile: Vladimir Vladimirovich Nabokov | In English. The scandalous success of Lolita (1955) allowed Vladimir Nabokov to retire from teaching at Cornell University and move to Switzerland to devote himself to fiction, translation, criticism and lepidoptery. This was only one of the many metamorphoses that Nabokov, a Russian noble, underwent while in exile, moving from Russia to the Crimea, Cambridge UK, Berlin, Paris, Cambridge MA, Ithaca, Hollywood and finally Montreux. Examines the Russian roots of Nabokov's Russian (in translation) and American novels about exile: his first novel, Mary (1926), The Defense (1929), Glory (1932), and his tribute to 19th-century Russian literature, The Gift (1938), which he considered his greatest Russian novel. These are followed by Lolita (1955), Priglasenie (1957) and Pale Fire (1962), his memoirs, Speak, Memory (1966), and some essays and short stories. Films include Lolita by Stanley Kubrick (1962) and Adrian Lyne (1997). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only RUS 439 or SLC 439 or ENG/RUS/SLC 494 (Art in Exile: Vladimir Vladimirovich Nabokov) |
| RUS | 440 | Russian Mass Media | Explores various aspects of modern Russian life through printed mass media, especially Internet media sources, and helps to develop advanced spoken, listening, reading and written skills in Russian. Students work with live television news broadcasts and investigate the most important general sources of electronic information, including electronic newspapers and the main Russian Web sites on a wide range of issues such as culture and the arts, government and politics, business and economics, armed conflicts, and accidents and catastrophes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): RUS 211; 212 with C or better. Credit is allowed for only RUS 440 or RUS 494 (Russian Mass Media) |
| RUS | 441 | Survey of Russian Culture | Interplay of artistic, social, and political forces in the development of Russian culture from the Kievan period to the present. Exclusive use of Russian language source materials. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G & H | Pre-requisites: RUS 312 with C or better |
| RUS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| RUS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| RUS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| RUS | 495 | Russian for Heritage Speakers | Generates professional proficiency by developing advanced communicative and written competency in standard literary Russian. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | |

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| RUS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| RUS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| RUS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| RUS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SAO | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| SAO | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 196 | Study Abroad Office Placeholder | Reserved for undergraduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated by SAO following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program"; participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to an ASU Study Abroad Office program is required. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Office of the Provost | Office of the Provost | 1-12 | | |
| SAO | 494 | International Program Courses | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SAO | 596 | Study Abroad Office Placeholder | Reserved for graduate participants in Study Abroad Office (SAO) Partnership and Exchange study abroad programs. This placeholder course remains on the student's academic record until the student's record is updated following the completion of the student's study abroad program. This course is then dropped and replaced with the ASU courses, credits, and grades equivalent to the coursework completed abroad. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 9 hours during the fall and spring semesters, or 1-6 hours during the summer session). Students participating in an SAO Partnership program must register for the topic "SAO: Study Abroad Program"; participants in an SAO Exchange Program must register for the topic "SAO: Exchange Program." NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete abroad. Acceptance to a Study Abroad program is required. | N | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-18 | | |
| SAO | 598 | International Program Courses | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Office of the Provost | Office of the Provost | 1-4 | | |
| SBS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |

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| SBS | 200 | Introduction to Social and Behavioral Sciences | Overview of the social and behavioral sciences, indicating their contributions to society and emphasizing interdisciplinary integration | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SBS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 301 | Cultural Diversity | Critical analysis of the complexities of the cultural politics of difference in the contemporary United States. Through interdisciplinary and comparative study, examines a range of theoretical and public/popular cultural discourses about the cultural contributions, experiences, perspectives of, by, and about U.S. residents of diverse racial, ethnic, class, gender, sexual, and transnational origins or identities. Analyzes the social conditions and historical precedents that have shaped current diversity concepts and debates, deepening knowledge and understanding of multiple perspectives on these issues and their relevance to social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (L or SB) & C | Pre-requisites: Minimum Junior standing; ENG 102, 105 or 108 with C or better |
| SBS | 302 | Qualitative Methods | Basic methodological issues in the systematic application of qualitative analysis of human social life. Surveys range of qualitative methods used by social and behavioral scientists. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 303 | Quantitative Methods | Concepts underlying design and implementation of quantitative research methods. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 304 | Social Statistics I | Statistical techniques of the social and behavioral sciences. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | |
| SBS | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SBS | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| SBS | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB, POS, SBS or SOC 374 |
| SBS | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SBS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 404 | Social Statistics II: Multivariate Analysis | Analysis of variance, multiple regression, dummy variable regression, path analysis, and related topics. Computer application to problem solving. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | CS | Pre-requisites: SBS 303 with C or better; SBS 304 with C or better |
| SBS | 410 | Topics in Identity/Difference | Topics which focus on race/ethnic, gender, sexual or cultural identity/difference. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 430 | Topics in Power/Knowledge | Selected topics concerning the effects of political and social institutions on perceptions of politics and political culture. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 440 | Family Studies | Theoretical frameworks for analyzing the development of family systems. Impact of social and economic conditions on family forms. May be repeated for credit when topics vary. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 447 | Citizenship, Nationalism, and Identity | Historical and contemporary examination of citizenship as a form of belonging and fidelity, and the creation of good citizens within the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, POS or SBS 447 |
| SBS | 450 | Topics in Local/Global | Examines links among social, political, economic changes at local, national, global levels. May be repeated for credit when topics vary. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SBS | 460 | Urban Studies | Studies local and global urban issues such as social geography, political economy, culture and social space, urban social diversity. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 442 or SBS 460 |
| SBS | 480 | Global Justice | Explores questions of justice that cross national borders, including delivery of foreign aid, immigration, and military intervention. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | Credit is allowed for only POS 480, SBS 480, CMN 598 (Global Justice), JHR 598 (Global Justice) or MAS 598 (Global Justice) |
| SBS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SBS | 490 | Senior Thesis I | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. First part of a six-semester-hour sequence, followed by SBS 491. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |

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| SBS | 491 | Senior Thesis II | Supervised, independent, interdisciplinary research and writing on an intellectual issue or social problem chosen by the student. Second part of a six-semester-hour sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SBS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SBS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SBS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SBS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| SBS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SBS | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SCM | 300 | Global Supply Operations | Resources and information to create and deliver products globally. Interfirm systems and industry supply chains. Customer, producer, and employee perspectives. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prereq(s): WPC or Nonbus major:ACC 240, 241, 242, 271; CIS 105, 220, 236, CON 251, CSE 100, 180; ECN 221, 231, IEE 380, STP 280; MAT 211, 266, 271; min 2.50 GPA OR Engr Mgmt major:ACC 241; CSE 110; IEE 380; MAT 266 w/ min C; Credit for OPM 301 or SCM 300 |
| SCM | 301 | Introduction to Modern Global Supply Chain Management | Examines the purchasing, operations, and logistics functions from the customer, producer, and employer perspective. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): non-Business major; minimum 2.00 ASU cumulative GPA; minimum 56 earned hours. Credit is allowed for only SCM 300 or SCM 301 |
| SCM | 303 | Honors Global Supply Operations | Explores the principles, concepts, and tools of supply chain management, with emphasis on how these are applied in the business world. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey School of Business Honors student; ECN 221 or 231 with C or better; Pre- or corequisite(s): ACC 241 or 242 or 271 |
| SCM | 314 | Analytics for Logistics | Focuses on practical tools for real-world decision making. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey BA or BS major; SCM 300 or SCM 303 with C or better |
| SCM | 315 | Business Decision Models | Introduces quantitative tools used to aid management decision making. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 300 or SCM 303 with C or better |
| SCM | 344 | Applied Logistics Management | Presents a synthesis of the principles in logistics (and supply chain) activities emphasizing the operation and integration of activities such as transportation, inventory, warehousing, facility location, customer service, packaging and materials handling. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre- or corequisite(s): SCM 314 with C or better if completed |
| SCM | 345 | Logistics Management | Logistics and supply chain activities emphasizing integration of transportation, inventory, warehousing, facility location, customer service, packaging, and materials handling. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite: W.P. Carey BS Supply Chain Management major; Pre/Corequisites: SCM 315 with C or better if completed |
| SCM | 354 | Procurement of Services | Management of the supply function for logistics-based organizations. Allows students to better understand the nature of procuring a service, contracting that service and establishing appropriate performance metrics. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): SCM 300 or SCM 303 with C or better |
| SCM | 355 | Supply Management | Management of the supply function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 300 or 303 with C or better |
| SCM | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): minimum 60 hours; SCM 300 or SOS 110 with C or better; Credit is allowed for only SCM or SOS 385 |
| SCM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | |
| SCM | 432 | Planning and Control Systems for Supply Chain Management | Planning and control systems for product and service flows in supply chain: production planning, master scheduling, MRP, ERP, inventory management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey Supply Chain Management BS major; SCM 315 and 345 with C or better; Pre- or corequisite(s): SCM 355 |

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| SCM | 440 | Quality Management/Measurement | Quality management and measurement, relationships with suppliers and customers, quality awards, certifications, programs, tools for process improvement and cost analyses. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): W.P. Carey BA Business (Retail Management) or BS Supply Chain Management major; SCM 300 or SCM 303 with C or better |
| SCM | 445 | Advanced Logistics Management | Logistics processes account for approximately 10% of U.S. GDP; therefore, the efficient and effective execution of these processes is critical to supply chain managers in corporations, government entities and nonprofit organizations. Includes an overview of the processes involved, a survey of the institutions and players in the processes, and the analytical tools to evaluate their efficiency and effectiveness. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): SCM 344 with C or better |
| SCM | 455 | Research and Negotiation | Current philosophy, methods, techniques for conducting strategic and tactical supply chain research and negotiations. Includes supplier price and cost analysis. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: W.P. Carey Supply Chain Management BS student; SCM 355 with a grade of C or greater |
| SCM | 463 | Global Supply Chain Management | Supply chain activities in international business with special emphasis on management of transportation, global sourcing, customs issues, and facility location in a global environment. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | G | Pre-requisites: W.P. Carey BS or BA student; SCM 300 or SCM 303 with C or better |
| SCM | 479 | Supply Chain Strategy | Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise systems. Provides a comprehensive perspective of supply chain management. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | L | Prerequisite(s): W.P. Carey Supply Chain Management BS major; SCM 355 with C or better; SCM 432 with C or better |
| SCM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SCM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SCM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisite(s): Minimum 60 hours |
| SCM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-6 | | Prerequisite(s): Barrett Honors student |
| SCM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-7 | | |
| SCM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-3 | | |
| SCM | 502 | Operations and Supply Management | Contemporary management issues, including environmental, project, and supply chain management; new product development; quality control; TQM. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey MBA students |
| SCM | 511 | Integrated Supply Chain Management | Management of sourcing, operations, and logistics as an integrated process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 515 | Decision Models for Supply Chain Management | Decision modeling approaches for supply chain management such as optimization, simulation, and decision analysis. Emphasizes spreadsheet-oriented approaches. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 516 | Introduction to Applied Analytics | Provides a solid foundation and deeper understanding of the use of quantitative modeling tools and techniques to solve problems faced in modern supply chains. Uses Excel workbooks to implement the appropriate quantitative methods, including forecasting demand, determining the capacity of a manufacturing line and the cycle times of parts being processed on the line, and methods to manage inventory. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |

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| SCM | 517 | Data-Driven Quality Management | Addresses the use of analytics tools and techniques to enhance the ability of quality management approaches to improve processes. Introduces modern quality management approaches including six sigma and design for six sigma. Covers the define, measure, analyze, improve and control (DMAIC) improvement cycle: the core process used to drive six sigma projects. DMAIC refers to a data-driven improvement cycle used for improving, optimizing and stabilizing business processes and designs. Provides an analytics roadmap to help users work through the DMAIC problem-solving process. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 518 | Analytic Decision-Making Tools I | Covers the skills and knowledge necessary for mastery of the use of quantitative modeling tools and techniques to support a variety of business decisions. Deterministic optimization techniques, including linear programming, nonlinear programming, integer programming, network models and a brief introduction to metaheuristics. Covers the use of these models for a variety of common business problems. Requires implementation of these models using Excel and standalone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 519 | Analytic Decision-Making Tools II | Addresses the skills and knowledge necessary to model situations where uncertainty is an important factor. Covers models including decision trees, queuing theory, Monte Carlo simulation, discrete event simulation and stochastic optimization. Uses these models for a variety of common business problems. Requires implementation of these models using Excel and stand alone software. Studies how to ensure that these solutions work in a wide variety of situations (what-if analysis). Describes each of these methods in detail. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Prerequisite(s): Business Analytics MS major |
| SCM | 520 | Strategic Procurement | Applies the principles, philosophies, and processes of supply management to the purchasing management process on a global basis and to facilitate the continuous improvement of the purchasing management system. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisites: SCM 502 with C or better |
| SCM | 521 | Supply Management and Negotiation | Selecting, developing, and executing appropriate sourcing strategies and processes. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | |
| SCM | 532 | Supply Chain Cost and Design Issues | Strategic design and development of supply chains. Focus on cost-management tools applied to supply chain design and supplier management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 541 | Logistics in the Supply Chain | Critical issues for customer perception of supply chain performance, including inventory planning, transportation, warehousing, information technology, and integrated logistics service. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 542 | Logistics, Globalization, and Economic Development | Global trade, global networks and the influence those networks have on economic development worldwide. Exposes geographic, economic and sociopolitical perspectives on these issues and invites students to draw conclusions from an increasingly informed perspective. Capstone experience for students in the MS in Global Logistics program. Synthesizes learnings from previous courses and applies this learning to specific issues that have a major global logistics component. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502 and 541; Co-requisite: SCM 515 |
| SCM | 545 | Cases in Global Logistics | Managing the conversion of raw materials to finished goods, including scheduling, work-in-process inventory management, and postponement/customization. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 3 | | Pre-requisite: SCM 502, 515, 541 and 542 |
| SCM | 551 | Operations Planning and Execution | Technology life cycles, technology forecasting, new product development process, innovation teams, innovation best practices. | N | LEC | N | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 2-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 587 | Project Management | Planning, scheduling, and controlling of projects in R & D, manufacturing, construction, and services. Project selection, financial considerations, and resource management. | N | LEC | N | GNA | W.P. Carey School of Business | Department of Supply Chain Management | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |
| SCM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | |
| SCM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | W.P. Carey School of Business | Department of Supply Chain Management | 1-12 | | Pre-requisites: W.P. Carey degree seeking Graduate student |

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| SCM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |
| SCM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | N | Z3 | W.P. Carey School of Business | Department of Supply Chain Management | 1 | | |
| SCM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | W.P. Carey School of Business | Department of Supply Chain Management | 1-15 | | |
| SCN | 250 | Physical Science by Inquiry | Laboratory-based development of concepts and reasoning skills in the physical sciences. Emphasizes open-ended investigations, dialogues between the instructor and individual students, and small group discussions. Helps students think of physical science as an active process of discovery in which they can participate. Helps preservice teachers understand inquiry and develop inquiry skills. Liberal arts students gain experience in the scientific process. Useful for students who wish to improve their science preparation before taking further science courses. Forms foundation for scientific literacy. | N | LAB | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 4 | SQ | Credit is allowed for only SCN 250 or 294 (Physical Science by Inquiry) |
| SCN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 300 | Foundations of Environmental Education | Introduces environmental education, including the philosophy, historical development, resource identification, curriculum development, field trips and other activities designed to provide the structure and development of the field of environmental education. Explores the antecedents to the present-day field and connects the field of environmental education to curricular programs that are an outgrowth of perceived and actual need in the field of environmental education. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 301 | Ecology and Natural History of the Sonoran Desert | Overview of the plants, animals, and geology of the desert ecosystem based on the Arizona K-12 Science Standards. Provides students with basic knowledge of the Sonoran Desert characteristics and its relationship to the total school curriculum. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 302 | Outdoor Education | Develops a meaningful framework for those who wish to enhance their skills in teaching about outdoor education and personal knowledge of the desert. Whether it be for personal challenge, leadership training or professional certification, outdoor education offers all participants the experience, inspiration and encouragement to live more sustainable lifestyles. The best thing you can do for the natural environment is to discover it then show it to others. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| SCN | 303 | Environmental Education Internship | Provides opportunities to learn more about natural sciences and local history; outdoor education and field trip course facilitation and training; individual and group development; facility care and maintenance including landscaping, gardening and carpentry; and the restoration and maintenance of the grounds and teaching materials. Supports and/or develops education projects and programs as outlined by the locations' Educational Outreach office. Various other tasks include: field trip coordination, development of curriculum and classroom materials, hands-on fieldwork, school outreach, off-site outreach events support, and Outdoor Education event support. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Prerequisite(s): Minimum 45 hours |
| SCN | 304 | Sonoran Desert Flora | Plants and plant communities support much of the diversity of life in the Sonoran Desert and the surrounding regions. Covers the fundamentals of ecology from the perspective of plants including population, community and ecosystem ecology. Also includes identification and classification of plants and plant communities in the Sonoran Desert region. Incorporates practical field exercises designed to acquaint the student with plant community analysis, classification and description. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours |

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| SCN | 305 | Tropical Ecosystems of Costa Rica | To better understand the astonishing diversity of tropical ecosystems students work together to investigate the ecology and cultures of neotropical ecosystems: how they were formed and how they are changing. Introduces students to language, culture and society of people and communities in Costa Rica. Students also examine their own cultural perspectives and beliefs. Focuses on four areas: (1) background on history and present-day society of Costa Rica, introductory conversational Spanish for interacting with Costa Ricans; (2) living in Costa Rica, community, family and education: visiting families and private and public schools; (3) debriefing and reflecting on Costa Rican language and culture; and (4) the location of Costa Rica, the rainforests' impact on the world, climate, cultures and contributions to science. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SCN 305 or SCN 494 (Tropical Ecosystems of Costa Rica) |
| SCN | 307 | Learning from Nature: Biomimicry and STEM | Introduces biomimicry, an emerging discipline that seeks to learn from nature to solve human problems. "Biomimicry" (from bios, meaning life, and mimesis, meaning to imitate) is a new discipline that studies nature's best ideas and then imitates these designs and processes to solve human problems. With an emphasis on getting outside and exploring the land around, focuses on observing, appreciating and learning from nature and natural systems in our local environment. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SCN 307 or SCN 494 (Learning from Nature: Biomimicry & STEM) |
| SCN | 400 | Sustainability Science for Teachers | Explores the challenges of sustaining human health and well-being on Earth due to human exploitation of natural resources. Seeks sustainable solutions through science, technology and society acting at global and local levels. Covers diverse approaches used by scientists, scholars and practitioners to study and assess human-environment interactions pertaining to sustainability challenges and solutions. Focuses on how to teach sustainability concepts in the K-8 classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only SCN 400 or SCN 401 or SCN 494 (Sustainability for the Elementary Teacher) |
| SCN | 401 | Sustainability Science, Technology, and Society | Explores the challenges of sustaining human health and well-being on Earth due to human exploitation of natural resources. Prepares students to think and engage critically with the world around them. Seeks sustainable solutions through science, technology and society acting at global and local levels. Uncovers diverse approaches used by scientists, scholars and practitioners to study and assess human-environment interactions pertaining to sustainability challenges and solutions. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing; Credit is allowed for only SCN 400 or SCN 401 or SCN 494 (Sustainability Science, Technology, and Society) |
| SCN | 411 | Science in Elementary Schools | Science education standards, curriculum, instructional and assessment strategies for all children. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Admission to the professional program; Credit is allowed for only EED or SCN 411 |
| SCN | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SCN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SCN | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |
| SCN | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SCN | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 588 | Solar Energy Colloquium | Discussion-oriented class focusing on topical issues in solar energy. Knowledge of thermodynamics or electric power systems is recommended to succeed in this course. | N | LEC | N | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 3 | | Prerequisites: Graduate Engineering major; credit is allowed for only MAE 588 or SEC 588 |
| SEC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | |
| SEC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Energy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SEC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-12 | | |
| SEC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | N | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-4 | | |
| SEC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-12 | | |
| SEC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report or publication. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 784 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SEC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1-12 | | |
| SEC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | School for Engineering of Matter, Transport & Enrgy | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| SED | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 322 | Classroom Leadership in Secondary Schools | Theories and practices for managing and maintaining secondary classrooms for learning; strategies for home/school communication; and leadership roles for teachers. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 396 | Clinical Experience I | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 397 | Clinical Experience II | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 0-1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 464 | Middle-School Curr/Org | Educational implications of the characteristics of a diverse adolescent population on middle-level organization and components, curriculum, instructional strategies, assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 478 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3-15 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 480 | Special Methods of Teaching Social Studies | Interdisciplinary approaches; production and collection of materials. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 481 | English Teaching Methods for Secondary Schools | Instructional, organizational, and presentation methods for English in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 482 | Science Teaching Methods for Secondary Schools | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SED | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SED | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SED | 496 | Clinical Experience III | Applies course content in a secondary school setting. Emphasizes observation, pupil management, planning and delivering instruction, and assessment. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SED | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SED | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 501 | Introduction to Effective Instruction | Introductory course for certification program in secondary education. Emphasizes developing basic classroom management, instruction, and evaluation. Includes a field assignment of at least 120 hours. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 511 | English/Language Arts Teaching Methods in Secondary School | Instructional, organizational, and presentation methods. This course, which focuses on the general content and pedagogy of Secondary English/Language Arts, is aligned directly with the State of Arizona Professional Teaching Standards and NCTE standards for teaching secondary English. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 512 | Math Teaching Methods for Secondary Schools | Examines secondary school curricular material and analyzes instructional devices. Teaching strategies, evaluative techniques, diagnosis, and remediation and problem solving. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 513 | Science Teaching Methods for Secondary School | Methods of instruction, organization, and assessment of science for secondary and middle grade schools. This course, which focuses on the general content and pedagogy of secondary science, is aligned directly with the State of Arizona Professional Teaching Standards and INTASC Principals. | N | LEL | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: enrolled in the MAC or InMAC program |
| SED | 520 | Science Methods for Early Adolescence | Examines the interrelationships between theory and practice in teaching science. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 522 | Secondary School Curriculum Development | Social processes, issues, principles, patterns, and procedures in curriculum development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student |
| SED | 533 | Middle/Secondary Instruction, Management, and Assessment | Analyses of procedures, methods, techniques, and experiments in teaching in secondary schools. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Must be a graduate student |
| SED | 544 | Creating Classroom Climates | Emphasizes classroom management and instructional strategies for establishing positive classroom climates that facilitate learning. Includes field experience. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 547 | Teaching Mathematics in the Middle Grades (5-9) | Strategies and methodologies to teach mathematics in the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 560 | Teaching Mathematics with Technology | Strategies and methodologies to teach mathematics with technology, focusing mainly on the middle grades (5-9). | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 561 | Teaching Science with Technology | Strategies and methodologies for effective technology-enhanced science classrooms and improved learning. Models student-driven inquiry teaching throughout the course. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------|
| SED | 567 | Clinical Experience I | The teaching internship or clinical experience is the occasion for the student to become an active member of the teaching profession. This tremendous learning opportunity requires commitment, reflection, time and effort. Challenges students to develop subject area knowledge; ability to collaborate with colleagues and parents; understanding of pre K-12 students as people with social, emotional and intellectual needs. Also challenges ability to plan and conduct learning experiences with students; ability to assess learning and program outcomes; and ability to improve, through thoughtful questioning and analysis, their own instructional decisions while developing their own ideas about the structure of schooling, field of education, and the nature of learning. | N | PRA | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 576 | Clinical Experience II | The teaching internship or clinical experience is the occasion for the student to become an active member of the teaching profession. This tremendous learning opportunity requires commitment, reflection, time and effort. Challenges students to develop subject area knowledge; ability to collaborate with colleagues and parents; understanding of pre K-12 students as people with social, emotional and intellectual needs. Also challenges ability to plan and conduct learning experiences with students; ability to assess learning and program outcomes; and ability to improve, through thoughtful questioning and analysis, their own instructional decisions while developing their own ideas about the structure of schooling, field of education, and the nature of learning. | Y | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 578 | Student Teaching in the Secondary School | Practice of teaching. Relationship of theory and practice in teaching. Postbaccalaureate students only. | N | PRA | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 579 | Apprentice Teaching in Secondary Education | Apprentice teaching in secondary school classrooms. Synthesized experience in classroom management, curriculum, instruction and assessment. Must be taken four times for a total of 12 semester hours. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 2-3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SED | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SED | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|--------------------------------|-----------------------------------------------|-------|-----------------|-----------------------------------------------------------------------------|
| SED | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SED | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-3 | | |
| SEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |

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| SEM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-4 | | |
| SEM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-12 | | |
| SEM | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |
| SEM | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1 | | |
| SEM | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Materials Science and Engineering Program | 1-15 | | Pre-requisites: Science & Engr of Materials PhD students |
| SER | 101 | Introduction to Engineering Design I | Introduces engineering as a profession, critical thinking in engineering design and modeling, team dynamics, engineering communication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Credit is allowed for only SER 101 or EGR 101 |
| SER | 102 | Foundations of Engineering Design Project II | Development and experimental verification of engineering models, engineering design, data acquisition, critical analysis of data, introduction to CADD, engineering communications. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR 101; MAT 170; Pre or Co-requisite: ENG 101 (or ENG 105, 107 or 111); Credit is allowed for only EGR 102 or SER 102 |
| SER | 105 | Personal Computing Environment | Introduces computing devices and their ethical use for creativity, communication and organizing information; utilizes a range of devices and applications; program-ability for the end-user; approaches for organizing, sharing, securing and communicating information; managing a secure computing environment. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | |
| SER | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SER | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 200 | Software Engineering I | Overview of the foundations of software engineering, with particular orientation toward software development lifecycle processes (SDLP). | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 1 | | |
| SER | 215 | Software Enterprise I: Personal Process | Software engineering; personal software processes for individual professionalism; time and defect estimation, yield, and productivity. Software tools. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 200 with C or better |
| SER | 216 | Software Enterprise II: Testing & Quality | Project-centered course covering testing and quality in software engineering; concepts, tools, and methods in testing and quality management; teamwork and communication in software engineering. Project based. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 215; Pre- or corequisite(s): CST 230 or SER 222 |
| SER | 221 | Programming Languages and Their Execution Environment | Introduces the fundamental programming language concepts of data, type, control, abstraction, and structure; software development and execution environments; programming language paradigms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 or SER 102; Credit is allowed for only CST 220 or SER 221 |
| SER | 222 | Design and Analysis of Data Structures and Algorithms | Data structures and related algorithms for their specification, complexity analysis, implementation and application. Sorting and searching. Professional responsibilities that are part of program development, documentation and testing. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: EGR/SER 102 (or CST 200); MAT 243; Credit is allowed for only CST 230 or SER 222 |
| SER | 232 | Computer Systems Fundamentals I | Logic design and computer organization; number systems and arithmetic, boolean algebra; digital systems components; assembly language and instruction set concepts and application. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | CS | Prerequisite(s): CST 100, EGR 101 or SER 101 (or corequisite: CST 100); MAT 117 or higher; Credit is allowed for only CST 150 or SER 232 |
| SER | 234 | Operating Systems and Networks | Fundamentals of operating systems, process management, scheduling, synchronization techniques and file management. Network technology, topologies, protocols, application control; network and operating system security. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200; SER 232 |
| SER | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 316 | Software Enterprise: Construction and Transition | Best practices in software construction in the context of a team project, including refactoring, defensive programming, unit testing, and configuration and release management. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre/Co-requisite: CST 315 |
| SER | 321 | Principles of Distributed Software Systems | Design and implementation of distributed software components; process and memory management underlying software applications; sockets, protocols, threads, XML, serialization, reflection, security, and events. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: CST 200 (or SER 102); MAT 243; Credit is allowed for only CST 420 or SER 321 |
| SER | 322 | Principles of Database Management | Fundamental methods in modeling and managing data-oriented systems. Relational, object, and hierarchical data modeling techniques. Query languages including SQL. Semantics of transaction processing. Database system architectures including cloud-based, client-server, and embedded databases. Security and privacy issues. Modern trends in data management including managing data on the cloud, unstructured data type management, data mining, and business analytics, and NoSQL data management platforms. | N | LEL | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 (or SER 102) and MAT 243 with C or better; Credit is allowed for only CST 433, SER 322 or CST 598 (Principles of Database Management) |
| SER | 332 | Introduction to Graphics and Game Development | Foundations of graphics as used in modern rendering and basic principles of the game development pipeline. Graphics and math concepts and their application in games, graphics and visualization. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 200 |
| SER | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 401 | Computing Capstone Project I | First half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisites: Senior standing; BS Applied Computer Science or BS Software Engineering major |
| SER | 402 | Computing Capstone Project II | Second half of a comprehensive project experience based on cumulative knowledge and skills gained in earlier coursework. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 401 |
| SER | 421 | Web-Based Applications and Mobile Systems | Distributed Web and mobile applications, their design, architecture and supporting technologies; user-interaction concepts and technologies; design and implementation of software servers for Web and mobile systems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 321 |
| SER | 422 | Web Application Programming | Design and implementation of Web application. Languages, frameworks, technologies, tools and methods used to realize Web client and server solutions. Approaches for securing, testing as well as determining the quality and reliability of Web applications. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: CST 433 (or SER 322); SER 421 |

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| SER | 423 | Mobile Systems | Mobile applications, their architecture, design, and supporting technologies; mobile device operating systems and frameworks; synchronizing mobile applications, support for inter-application data-exchange; accessing and manipulating special-purpose device capability such as location, orientation and input modality. Practices for securing mobile runtimes and optimizing run-time performance. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 421 |
| SER | 431 | Advanced Graphics | Topics in real-time rendering and graphics hardware. Uses graphics processing unit hardware to implement rendering of higher-order surfaces and special effects. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: SER 332 |
| SER | 432 | Game Engine Architecture | Functional requirements of a modern game engine architecture. Students work in teams to develop advanced features for a game engine. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 or SER 321 |
| SER | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | | Prerequisite(s): Barrett Honors student |
| SER | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SER | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | |
| SER | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-7 | | |
| SER | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | IND | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-3 | | |
| SER | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 501 | Advanced Data Structures and Algorithms | Advanced algorithms and how they are effectively applied to solve problems. Algorithm design, analysis, classification, optimization, and application. Practice implementing and employing algorithms to solve realistic problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 502 | Emerging Languages and Programming Paradigms | Emerging programming languages, their design, description, implementation, and advanced features; API design, including facilities for creating secure distributed applications, facilities supporting software services, naming and composition; language paradigms and the resulting implications on execution, run-time systems and storage management, approaches to compilation and execution. Requires ability to program in an object-oriented programming language and knowledge of data structures, algorithms, and analysis. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Engineering graduate student |
| SER | 515 | Software Enterprise: Inception and Elaboration | Project-centric course focusing on the relationship of software processes to entrepreneurship and business processes; requirements specification and requirements analysis; study of the context and evolution of the software enterprise. The first of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Master of Computing Studies or Software Engineering MS student |
| SER | 516 | Software Enterprise: Project and Process Management | Project-centric course focusing on software process, project management, and technical leadership. Study of the context and evolution of software enterprise project management. The second of a two-semester sequence. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 515 |
| SER | 517 | Software Factory I | First in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Masters of Computing Studies or Software Engineering MS student |

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| SER | 518 | Software Factory II | Second in a two-semester capstone culminating experience for graduate students. Student teams work through concurrent product and service offering lifecycles in a project context. Covers concepts including opportunity assessment, risk management, technology evaluation, licensing models, resource planning, delivery models such as hosted, turnkey, and Software as a Service (SaaS), technology acquisition, outsourcing, governance, quality assurance, software certification, and continuous process improvement. | N | LEL | N | GNA | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): SER 517 |
| SER | 520 | Computer Architecture | Basics of computer architecture. RTN, RISC, CISC concepts; computer arithmetic; ALUs; memory systems; I/O. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Fulton Schools of Engineering student; CST 364 (CET 364) OR Graduate, Non-Degree, or Post Bacc student |
| SER | 533 | Database-Centric Enterprise Applications Development | Solutions for enterprise software systems based on relational database technology. Persistence solutions in middleware frameworks. O/R, XML, and scalability issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0; CST 433 |
| SER | 540 | Internet-Enabled Embedded Devices | Accessing hardware devices through Internet, including Applets, HTTP, custom byte streams, XML-RPC, SOAP. Building network-based applications that interface hardware. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): CST 420 with C or better |
| SER | 552 | Digital Systems Design | Digital system design techniques and applications. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); CST 452 |
| SER | 554 | Distributed Computing | Topics in distributed systems, including communications, distributed operating systems, fault-tolerance, and performance issues. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 556 | Distributed Applications for Windows Platforms | Distributed Web-based applications using Windows frameworks such as .NET. Essential components, XML, remoting, Web services, windows services, user interfaces. | N | LEC | N | OPT | Ira A. Fulton Engineering | Software Engineering | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); CST 420 with C or better |
| SER | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Minimum University Cum GPA 3.0 |
| SER | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | |
| SER | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking) |
| SER | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SER | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Software Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Software Engineering | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SER | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Software Engineering | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 100 | Introduction to Exploration | Science and engineering of Earth, solar system, and space exploration. Experimental design, engineering design; teaming; the professions of science and engineering. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | CS | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher or Pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |
| SES | 106 | Habitable Worlds | Are we alone in the Universe? If so, why? If not, where are our cosmic cousins? Such questions, once the domain of science fiction, are on the verge of being answered with science facts. Astronomers are discovering planets around other stars. Planetary scientists are exploring the worlds in our solar system. Biologists are unlocking the secrets of metabolism and evolution. Geoscientists are determining how the Earth supports life. And as we struggle to build a sustainable future for ourselves, all of us are finding out how technologically advanced civilizations rise and how they might fall. This course surveys these topics. In the process, students master basic concepts from across the major areas of science and learn what makes the Earth a habitable world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | SQ | |
| SES | 111 | Exploration of Science Teaching | General overview of the profession of the science educator with a look at student, teachers, curricula, and classroom techniques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | |
| SES | 121 | Earth, Solar System, and Universe I | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | SQ | Prerequisite(s): Mathematics Placement Test with a score of 50% or higher or pre- or corequisite(s): MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed |

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| SES | 122 | Earth, Solar System, and Universe II | Basic principles of geology and astronomy combined to examine the history of the universe, the solar system, and Earth. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): SES 121 with C or better |
| SES | 123 | Earth, Solar System, and Universe Laboratory I | Studies astronomical and geological processes through observations and measurements. Requires field trips and evening telescopic observing. Both SES 121 and SES 123 must be taken together to secure SQ General Studies credit. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | SQ | Pre/Corequisite(s): SES 121 with C or better if completed |
| SES | 124 | Earth, Solar System, and Universe Laboratory II | Studies astronomical and geological processes and life through observations and measurements. Requires field trips and evening telescopic observing. | N | LAB | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): SES 123 with C or better. Pre- or corequisite(s): SES 122 with C or better if completed |
| SES | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | |
| SES | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 311 | Essentials of Astrobiology: Exploration for Life in the Universe | Origin and evolution of life on Earth. Strategies to explore for life in the cosmos. Possible field trips to explore regional geological analogues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): BIO 181 (188), CHM 113 or PHY 121; MAT 265 or 270 |
| SES | 330 | Practical Electronics and Instrumentation | Applied principles of electronics and mechanical design as used by the modern instrument builder, using a systematic approach to the design process. Identify a scientific problem, develop specifications necessary to solve the problem, develop a prototype solution, test solution for plausibility, break down problem into components, design and build the solution then test in a relevant environment. Builds on introduction to circuits and engineering concepts from prerequisite courses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 4 | | Pre-requisites: PHY 131 and 132 with C or better |
| SES | 350 | Engineering Systems and Experimental Problem Solving | Introduces integration of scientific and engineering computational methods into scientific research and successful exploration. Provides an active, project-based environment for learning science and engineering by means of a common set of computational tools. Also provides a detailed overview of procedural and object-oriented programming with an emphasis on problem solving. Students solve problems by developing software in an interpreted language (Python). Problems may include visualizing data, interfacing with hardware, or solving numeric problems. Covers procedural programming concepts including data types, variables, control structures, arrays, and data I/O. Covers object-oriented programming concepts including object creation and use, object interaction, and the design of simple classes. Covers software engineering concepts including testing, incremental development, understanding requirements, and teamwork. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): MAT 267, 272 or 275; PHY 131 and 132 (or 151) with a grade of C or better |
| SES | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 405 | Exploration Systems Engineering | Provides an introduction to systems engineering with an emphasis on the following topics: the systems engineering process, requirements, design fundamentals, subsystem fundamentals, trade studies, integration, technical reviews, case studies and ethics. Prepares the student for the capstone spacecraft/mission design course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Prerequisite(s): SES 330 and SES 350 with C or better |
| SES | 410 | Senior Exploration Project I | Design and development of an Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; Senior standing |
| SES | 411 | Senior Exploration Project II | Continuation of SES 410. Development of Earth, solar system, or space exploration project. Conceptualization, design, development, deployment, data analysis, communication. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 3 | | Pre-requisites: ENG 101, ENG 105 or ENG 107; SES 410 |
| SES | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |
| SES | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SES | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-6 | | Prerequisite(s): Barrett Honors student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SES | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-3 | | Prerequisite(s): minimum 45 hours |
| SES | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | |
| SES | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-4 | | |
| SES | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SES | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Earth and Space Exploration | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SET | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| SET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| SGS | 101 | Thinking Globally: The Individual and Authority | Examines the changing notions of the individual and authority over history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | |
| SGS | 107 | Religion and Globalization | Explores how different religions interact with the various processes of globalization, including how the world's major religions have been transformed by economic, political, cultural, and technological aspects of globalization. Topics include religious terrorism, human rights, religion, and gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Credit is allowed for only REL 107, 194 (Religion and Globalization) or SGS 107 |
| SGS | 111 | Global History Since 1500 | Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Credit is allowed for only HST 101 or SGS 111 |
| SGS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SGS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 202 | Technology and Nature in World Settings | Examines changing interactions among humans and nature, geographic systems, global demography, and environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | |
| SGS | 203 | Contemporary Global Trends | Gives a grounding in patterns of international politics and global social change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | |
| SGS | 204 | Professional Global Career Development | Orients the student to working in global contexts and to thinking critically about careers in the global arena. Focuses on working in organizational settings distinctly global. Three modules: nation-state, corporations, and working international organizations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 240 | Introduction to Southeast Asia | Interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (HU or SB) & G | Pre-requisites: Credit is allowed for only ASB, GCU, HST, POS, REL, or SGS 240 |
| SGS | 245 | Introduction to South Asia | Provides an introduction to the history and major contemporary political, economic, social, religious and cultural features of the South Asia region at large and of selected South Asian nations in particular. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & H & G | Pre-requisites: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only HST, REL, SGS 245 or REL 294 (Introduction to South Asia) |
| SGS | 294 | Special Topics | | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 301 | Principles of Global Studies | Presents current debates about globalization and subjects these to critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SGS | 303 | Global Trends | Analyzes the process of globalization across boundaries through the investigation of the determinants and ramifications of globalization from the vantage of modern social sciences. Students are expected to conduct and articulate independent critical analyses toward a more in-depth understanding of this social phenomena, global history, and particularly the global economy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB | Pre-requisites: Minimum 30 hours; ENG 102 with C or better |
| SGS | 305 | Research Methods | Broad introduction to social science research methodology and design, particularly the methods used to analyze global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L | Pre-requisite: SGS 101 (or 301) with C or better; Credit is allowed for only POS 301 or SGS 305 |
| SGS | 310 | Global Urban Systems | Comparative approach focuses on relationship between development of comparative urban systems and environmental impacts at local, regional, global scales. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: SGS 101 or 301 with C or better |
| SGS | 311 | Urbanization in China | Explores contemporary and future Chinese urbanization from economic, built form, and environmental perspectives. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |
| SGS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SGS | 320 | Mechanisms of Governance | One of the fundamental issues in the social sciences concerns the problematic attainment of social order, which is the principal aim of governance. Presents the five principal mechanisms purported to account for social order, and illustrates these by providing empirical examples of each; includes film clips. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102 with C or better |
| SGS | 321 | International Institutions and Global Governance | Provides an in-depth examination as to how the international community organizes itself, through international institutions, to deal with serious international issues, and how the institutions of international governance can be improved. Studies diverse examples of international institutions primarily from the perspective of international relations (IR) theory and the role of international law (IL). | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 321 or 394 (International Institutions) |
| SGS | 325 | Globalization and Socio-Economic Justice | Addresses a trend producing increasing interconnectedness of economies and societies, as well as creating new conflicts and divisions. Provides greater understanding of global forces, as well as the effect of these forces on global economic justice. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Minimum 2.00 GPA. Credit is allowed for only JUS 325 or SGS 325 |
| SGS | 330 | Globalization and the Environment: Problems and Solutions | Assesses the impact of globalization on the earth's environment. Examines such issues as biodiversity loss to pollution to urbanization to climate change, among others, and assess how globalization has driven, impacted or improved these environmental problems. Emphasis on understanding the social, political and economic factors that have contributed to global environmental change and the degree to which globalization processes are something 'new', as well as on examining the ability of communities, nations and transnational institutions to manage these global problems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; 30 completed hours |

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| SGS | 340 | Violence, Conflict and Human Rights | Interdisciplinary examination of the evolution and role of human rights in global society. Major themes include the political struggles over enforcement of human rights and curtailment of violence against individuals. Pays close attention to the role of non-governmental organizations and diplomacy in advancing human rights norms and also examines America's role in human rights, both at home and abroad. Focuses on the causes and effects of violence and human rights abuses in the context of torture, the "war on terror," and crimes against humanity. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisite: ENG 102, 105 or 108; SGS 101 (or 301); 30 minimum hours; Credit is allowed for only SGS 340 or 394 (Violence/Conflict/Human Right) |
| SGS | 341 | Humanitarian Crisis and International Intervention | Focuses on political, legal, and ethical issues raised by decision about military interventions in genocide and humanitarian crisis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 343 | Religion, Nationalism, and Ethnic Conflict | Examines the role of religion in national and ethnic conflict in the contemporary world. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | HU & G | Pre-requisites: Minimum 24 hours; ENG 102, 105 or 108 with C or better; Credit is allowed for only SGS 343 or REL 379 |
| SGS | 344 | Facing the Past: Truth, Memory, Denial After Atrocities | The past has never been so present as it is today. Over the last two decades, the world has shown an increasing interest in uncovering the hidden and forgotten histories of state-sponsored atrocities and acknowledging the fate of victims and survivors. Studies this movement for the recovery of truth, memory, and moral responsibility includes a wide range of actors and takes a number of different forms. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 350 | Economic Development and Globalization | Major issues and models in economic development. Studies development policy and foreign aid practiced since the 1970s and recent critique of these practices. Analyzes the mistakes made in the last 40 years, and potential for improving the practice of foreign aid. Contemporary issues in development economics, including the impacts of bad governance, foreign aid, corruption, war, military intervention and democracy on economic growth with emphasis on policy evaluations in health, education, microfinance and monitoring corruption. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 30 hours; Credit is allowed for only SGS 350 or 394 (Prin of Econ Dev Global) |
| SGS | 360 | Cultural Aspects of Globalization | Cultural aspects of globalization, starting with a theoretical discussion of what culture is and then weaving this discussion into an empirical examination of UNESCO's World Heritage program as a practical means of studying the role of culture in globalization. A number of questions guide our inquiry: What is culture? What forms does it take? Can culture be preserved? If so, what are the consequences? How is the UNESCO World Heritage Program structured? How does it conceive culture? What is its understanding of the global and the role of the local in it? | N | LEC | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; SGS 101 or 301; Minimum 30 hours; Credit is allowed for only SGS 360 or 394 (Cultural Aspects of Globalization) |
| SGS | 366 | Islam and Islamic Societies in Africa: Social and Political History | An in-depth study of the fundamental principles of Islam. Course will examine various forms of development of Muslim societies and institutions in Africa through time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | G | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 hours; Credit is allowed for only AFR 372 (or AFS 372) or REL 362 or SGS 366 or AFS 394/REL 394/SGS 394 (Islam and Islamic Societies in Africa: Social and Political History) |
| SGS | 381 | Modern Southeast Asia | Vietnam, Laos, Cambodia, Thailand, Burma, Malaysia, Singapore, Brunei, Indonesia, and Philippines since 1750: imperialism, revolution, and independence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | SB & G & H | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST 391 or SGS 381 |
| SGS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-4 | | |
| SGS | 441 | Religion and Global Politics | Explores the nature and role of religion in international politics in the modern period. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | L & G | Credit is allowed for only REL 480 or SGS 441 |
| SGS | 442 | Different Voices Within Contemporary Islamic Discourse | Examines modern Muslim discourse on major contemporary issues such as Shari'a, Jihad, secularism, gender, civil rights, democracy, extremism, religious violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only AFR 480 (or AFS 480) or REL 461 or SGS 442 |
| SGS | 454 | Gender, Culture, and Development | In-depth analysis of gender roles related to health, family, work, education and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 or 300 or minimum 45 hours; Credit is allowed for only SGS 454 or SOS 447 or TCL 447 or WST 447 or TCL 598 (Gender, Culture & Development) |
| SGS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-12 | | |
| SGS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| SGS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SGS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | |
| SGS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-6 | | Prerequisite(s): Barrett Honors student |

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| SGS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Politics and Global Studies | 1-7 | | |
| SGS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Politics and Global Studies | 1-3 | | |
| SGS | 501 | Global Theory | Examines theoretical and analytical frameworks employed by institutions to frame action related to increased global uncertainty including economic, sociological, psychological, decision theory, gaming and institutional behavior frameworks. Uses case studies in key global issue areas such as climate change/natural hazards, energy security, urbanization, food security, security, failed states. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SGS | 502 | Global Institutions and Actors | Examines key types of global institutions, (1) multinational businesses, e.g., Toyota, (2) international development organizations, e.g., the World Bank, and (3) voluntary organizations, e.g., the Red Cross/Crescent, in terms of the roles that they play in shaping localized outcomes. Using case studies, explores the impact of international actors in terms of the power and influence that they exert through international treaties, standards, information diffusion, influence on local governments and other organizations, dissemination of international "best practice." | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SGS | 503 | Methods: Global Decision Making Under Uncertainty | Examines and critically assesses approaches and methods used in decision making and planning under uncertainty in global contexts, e.g., scenarios, SWOT, risk analysis, contingency planning, gaming, economic forecasting, anticipation-foresight techniques, decision making under complex conditions, and rapid assessment techniques. Explores the strengths and weaknesses of different approaches under varying conditions, synergies achievable through application of multiple methodologies, and normative assumptions underlying various methodologies. Students gain "hands-on" experience in the use of a variety of techniques through assignments based on real-world situations. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 504 |
| SGS | 504 | The Individual As Decision Maker in Cross-Cultural Global Contexts | Focuses on the role of the individual decision maker in cross-cultural contexts, acting in the context of globally engaged institutions. The individual is virtually always embedded in an institutional environment whether as manager, planner, advocate, frequently acting as part of a team. It is recognized that the various agents/stakeholders involved in addressing an issue, negotiating a deal, in a global context, almost invariably hold significantly different worldviews, cultural norms and decision-making styles. Deals with the individual decision maker in both public and private decision-making milieus. Discusses modes of intervention and initiative. Addresses issues of leadership, reconciliation of different decision-making modes, and acting effectively in cross-cultural environments. Emphasizes decision making under high uncertainty, using case studies, e.g., pending nationalizations or privatization. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 503 |
| SGS | 505 | Preparation for the Global Field Project | Prepares students for the global field project. In addition to scheduled classes, each student meets with her/his advisor at regular intervals during the semester to prepare for the Global Field Project. During the semester, students prepare a work plan for their Global Field Project, including objectives of the exercise, specifications of deliverables. Network building is an important secondary objective, and development of an esprit de corps among Global Studies masters students. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Politics and Global Studies | 3 | | Prerequisite(s): SGS 501; SGS 502; Pre- or corequisite(s): SGS 503; SGS 504 |
| SHS | 101 | American Sign Language I | Basic receptive/expressive conversational skills; basic grammar and syntax rules. Orientation to deafness and deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | |
| SHS | 102 | American Sign Language II | Further development of receptive/expressive conversation skills in ASL; finger spelling. Continued exploration of deaf culture. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 101 with C or better; taken within the past two years |
| SHS | 105 | Introduction to Human Communication Disorders | Introduces hearing, language, and speech problems in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |

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| SHS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | Prerequisite(s): Freshmen; maximum 25 earned hours |
| SHS | 201 | American Sign Language III | Continued development of fluency in ASL with emphasis on more abstract concepts and the ability to narrate events. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 102 with C or better and taken within the past two years |
| SHS | 202 | American Sign Language IV | Further development of fluency in ASL with emphasis on literature, folklore, and signing narratives with multiple characters. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 201 with C or better and taken within the past two years |
| SHS | 250 | Introduction to Phonetics | Introduces English phonetics with emphasis on phonetic transcription, articulation, phonology, and disorders of speech. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 310 | Anatomical and Physiological Bases of Speech | Noncadaveric study of anatomical systems that underlie human speech and language, including respiration, phonation, articulation, and related nervous system processes. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY 101; Pre- or corequisite(s): SHS 250 |
| SHS | 311 | Hearing Science | Studies the physical characteristics of sound and of the structure and function of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): BIO 201; PHY101; SHS 105 |
| SHS | 350 | Brain Memory and Language | Covers memory and language and their associated brain areas, and the resulting behavioral consequences of injury and disease. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 367 | Language Science | Normative aspects and integration of language structure, comprehension, and production in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | |
| SHS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 375 | Speech Science | Normative aspects of speech, hearing, and language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310; SHS 311; Pre- or corequisite(s): SHS 250 |
| SHS | 376 | Psychoacoustics | Introduces acoustics, cochlear anatomy and physiology, and the perception of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 401 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311; Credit is allowed for only SHS 401 or 501 |
| SHS | 402 | Clinical Methods and Treatment of Communication Disorders | Principles and techniques for planning speech and language intervention, including observation experiences. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 250, 465 |
| SHS | 461 | Accent Modification | Increases speech intelligibility in non-native English speakers by changing their English pronunciation skills. International students learn the pronunciation of American English vowels and consonants, intonation and stress patterns, and rhythm of speech. Conducts pre- and post-assessments of the students' intelligibility to determine the need for improvement on specific sounds and speech patterns. | Y | LEC | Y | YGB | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): minimum 45 hours |
| SHS | 465 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | SB | Pre- or corequisite(s): SHS 250; Credit is allowed for only SSH 465 or SHS 565 |
| SHS | 470 | Developmental Speech and Language Disorders | Introduces the nature of speech and language disorders in children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 465; Pre- or corequisite(s): SHS 250 |
| SHS | 473 | Implementation of Treatment Plans for Individuals with Communication Disorders | Students will learn to follow written treatment plans, individual education programs, individual support plans or protocols developed by the supervising speech-language pathologist. Opportunities to learn methods for eliciting therapy targets and to apply critical thinking and problem solving during therapy will be provided. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 483 | Professional Issues and Ethical Considerations for the SLP | Studies licensure laws, professional conduct, and ethical practice in the field of speech language pathology. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Admission to the Speech and Language Assistant Program in Dept of Speech and Hearing Science |
| SHS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |

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| SHS | 485 | Acquired Speech and Language Disorders | Introduces acquired speech and language disorders across the lifespan. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 310 |
| SHS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SHS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 496 | Aural Rehabilitation | Approaches to aural rehabilitation of children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311, 375 and 401; Credit is allowed for only SHS 496 or 596 |
| SHS | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | Prerequisite(s): Barrett Honors student |
| SHS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-7 | | |
| SHS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-3 | | |
| SHS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | Prerequisite: MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 501 | Introduction to Audiology | Introduces hearing disorders and the purposes and procedures for basic clinical tests of auditory function. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS 311 with C or better; Credit is allowed for only SHS 401 or 501 |
| SHS | 502 | Basic Audiometry | Covers the bases, purposes, rationales, and procedures for the core clinical tests of auditory function in adults and children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 504 | Amplification I | Operation, electroacoustic measurement, selection, and prescriptive fitting of amplification devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 505 | Survival Sign Language | Facilitates effective manual and alternative methods of communication with deaf individuals in clinical settings. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 508 | Pediatric Audiology | Emphasizes the principles and procedures for early identification and management of congenital and early-onset hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 510 | Amplification II | Verification and validation of hearing aid performance, benefit, and satisfaction. Fitting considerations for pediatric and geriatric populations. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |
| SHS | 511 | Auditory Perception by the Hearing Impaired | Psychophysical methods and behavioral aspects of hearing, with an emphasis on the perceptual consequences of sensorineural hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 512 | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 512 | Topics in Management of Medical Aspects of Speech-Language Pathology | Focuses on varying topics in management of medically based speech and language disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 513 | Neurophysiology of the Auditory System | Focuses on the neurophysiology of the normal auditory system and on changes associated with hearing loss. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 515 | Instrumentation and Calibration | Electronic instruments used to produce, modify, and measure characteristics of sound. Measurement standards and methods for calibration of audiologic equipment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 516 | Auditory Evoked Potentials | Electrophysiologic assessment of the peripheral and central auditory nervous system. Lecture, lab. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 517 | Balance Assessment | Clinical analysis and treatment of balance disorders and dizziness. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 518 | Auditory Rehabilitation | Study and clinical application of assistive technology and rehabilitative services for managing the effects of hearing impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 519 | Auditory Pathologies and Disorders | Familiarizes students with major diseases, pathologies, and disorders of the human auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | |

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| SHS | 520 | Auditory Pathologies/Disorders and Otoneurologic Applications | Familiarizes students with major pathologies and disorders of the human auditory system. Examines advanced otologic, neurologic, and audiologic approaches in the differential diagnosis and treatment of peripheral and central disorders of the auditory system. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 521 | Auditory Aging | Focuses on aging and related effects on the auditory system and audition. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 522 | Hearing Conservation/Instrumentation | Examines the prevention, identification, physiologic effects, and management of hearing loss due to noise exposure. Incorporates measurement standards and methods for calibration of electronic audiologic instruments used to produce, modify, and measure characteristics of sound. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Speech and Hearing Science graduate student |
| SHS | 523 | Advanced Audiometry | Discusses assessment and intervention procedures beyond the basic audiologic test battery and for special populations. Examines relevant new audiologic tests and procedures. Prerequisites: SHS 502, 513; SHS major. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): SHS major; SHS 502 and SHS 513 |
| SHS | 524 | Counseling in Communication Disorders | Theories of counseling emphasizing the psychological and emotional impact and management of individuals with communication disorders and their families. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 525 | Audiology Practice Management | Business practice issues, quality assurance, and professional ethics for the practicing audiologist. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 526 | Launch to Clinical Methods in Audiology | In Launch-to-Clinic, students rotate through on-campus observations and group orientation to the ASU Speech and Hearing Clinic. Students learn the policies and procedures of the ASU Speech and Hearing Clinic, software specific to the clinic operations, report writing, and clinical documentation with practice to develop the skills needed to succeed in subsequent clinical rotations both on and off campus. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): Audiology major. Credit is allowed for only SHS 580 (Audio Clinical Observation), and (Audiology Observation) |
| SHS | 530 | Development, Assessment, Intervention: Conception through 3 years | Covers development of children from conception to 3 years of age with a focus in early intervention. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 538 | Clinical Methods in Speech-Language Pathology | Provides the knowledge and skills in clinical methods for treatment and diagnosis in speech-language pathology. Topics cover essential information to participate in screening and prevention opportunities, to structure and implement therapy goals and strategies, to apply for internships, and to administer and interpret informal and formal diagnostic tests. | Y | LEL | Y | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. |
| SHS | 539 | Professional Issues in Speech-Language Pathology | Covers professional issues in speech-language pathology to ensure that students meet the professional knowledge requirements set forth in the American Speech-Language-Hearing Association (ASHA) certification standards. The topics cover essential information that the student needs to have in order to meet graduation requirements, comply with ASHA's ethical requirements, complete ASHA certification requirements, comply with Arizona state licensure requirements, prepare for a Clinical Fellowship Year and be involved in education and advocacy for the profession of Speech-Language Pathology. | N | LAB | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 1 | | Prerequisite(s): MS Communication Disorders major. Credit is allowed for only SHS 539 or SHS 580 (SLP Professional Issues) |
| SHS | 540 | Development, Assessment, Intervention: Preschool | Covers development, assessment and intervention of children from 3 years to 6 years of age, with a focus on preschool education. It includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language and hearing aspects. Also it addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Prerequisite(s): SHS 530 |
| SHS | 550 | Development, Assessment, Intervention: School-Age Children | Covers development, assessment and intervention of children from 6 years to 21 years of age, with a focus on school education. Includes child development of anatomical, neurophysiology, cognitive, motor, perceptual, speech, language, reading, writing and hearing aspects. Also addresses service delivery models in different contexts in children with atypical development in the different areas. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 540 |
| SHS | 552 | Physiological Measures of Auditory Function | Focuses on the measurement of otoacoustic emissions and acoustic immittance. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology or PHD Speech and Hearing Science student |
| SHS | 555 | Cochlear Implants | Covers the research and clinical aspects of cochlear implantation with a focus on the principles of speech coding strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Doctor of Audiology, or PHD Speech and Hearing Science student |

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| SHS | 560 | Development, Aging, Assessment, Intervention in Adults | Covers development, aging, assessment and intervention in adults with a focus on the elderly and the contexts for their service delivery. Includes changes in the adults related to anatomy, neurophysiology, cognitive, motor, perceptual, speech, language, literacy and hearing aspects. Also addresses service delivery models in different contexts where elderly and young adults with acquired disabilities are served. | N | LEL | N | GNA | College of Health Solutions | Department of Speech and Hearing Science | 4 | | Pre-requisite: SHS 550 |
| SHS | 565 | Speech and Language Acquisition | Speech and language development in the normal child. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Credit is allowed for only SHS 465 or SHS 565 |
| SHS | 567 | Neural Bases of Communication Disorders | Neuroscience and its application to matters of normal and disordered communication. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 570 | Communication Disorders and Multicultural Populations | Studies racial and ethnic biases and the communication behaviors and disorders in various cultural groups. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 571 | Augmentative Communication and Language Programming | Focuses on individuals across the age span who are unable or who are at risk for being unable to communicate with spoken language. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 572 | Language Assessment and Intervention in Infants and Toddlers | Focuses on the birth to 3-year-old population who are at risk for or who have communication and language disabilities. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 573 | Language Assessment and Intervention with School-Age Populations | Focuses on later language development, linguistic demands of academic settings, assessment and intervention strategies for older children and adolescents. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 574 | Management of Voice and Swallowing Disorders | Focuses on assessment and intervention of people with voice, swallowing, and craniofacial disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 575 | Aphasia and Related Neurogenic Language Disorders | Assessment and treatment of acquired neurolinguistic impairment. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 576 | Neuromotor Speech Disorders | Evaluation and treatment of the dysarthrias and apraxia of speech. Emphasizes acquired adult disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 577 | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 577 | Communication Disorders in Autism | Addresses communication disorders in children and adults with autism, as well as evaluation and intervention across a variety of settings and theoretical frameworks. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 579 | Feeding and Swallowing Disorders Across the Lifespan | Focuses on individuals across the age span who have feeding and/or swallowing disorders. Presents assessment and treatment strategies. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 580 | Clinical Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 581 | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 581 | Right Hemisphere Syndrome, Traumatic Brain Injury, and Dementia | Studies the nature, characteristics, and clinical management of cognitive and communicative impairments accompanying right hemisphere damage, TBI, and dementia. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | |
| SHS | 582 | Differential Diagnosis of Communication Disorders | Procedures for assessing speech/language disorders in children and adults. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 584 | Clinical Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-6 | | |
| SHS | 585 | Articulation and Phonology: Assessment and Intervention | Assessment and treatment of developmental articulation and phonological disorders. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2-3 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 587 | Language Assessment and Intervention with Preschool Populations | Focuses on preschool language disorders and assessment and intervention strategies for preschool children. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): MS Communication Disorders, Doctor of Audiology, or PHD Speech and Hearing Science student |
| SHS | 588 | Spanish Language Acquisition | Examines Spanish language acquisition in children and adults in the context of monolingual and bilingual language acquisition. | N | SEM | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SHS 588 or APL 588 |
| SHS | 589 | Audiology Grand Rounds | Grand Rounds bridges clinical and academic knowledge through case studies, application of emerging research, and clinical workshops. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |

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| SHS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 596 | Aural Rehabilitation | Approaches to aural rehabilitation in children and adults. Introduces educational audiology and assistive listening devices. | N | LEC | N | OPT | College of Health Solutions | Department of Speech and Hearing Science | 3 | | Credit is allowed for only SHS 496 or 596 |
| SHS | 597 | Bilingual Speech-Language Pathology | Reviews speech and language assessment and intervention practices with bilingual populations from infants to adults. | N | SEM | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SHS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-4 | | |
| SHS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SHS | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | OPT | College of Health Solutions | Department of Speech and Hearing Science | 1-12 | | |
| SHS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | College of Health Solutions | Department of Speech and Hearing Science | 1 | | |
| SHS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | College of Health Solutions | Department of Speech and Hearing Science | 1-15 | | |
| SLB | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 510 | Amateur Sports Law | Studies law, policy and problem solving in the amateur sports context, focusing primarily on interscholastic and intercollegiate athletics. Title IX and racial equality in sports. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 510 or LAW 791 (Amateur Sports Law) |

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| SLB | 511 | Strategic Career Planning | Focuses on examining job opportunities in the sports industry and the development of strategies for obtaining a position suitable to the talents and abilities of individual students. Students refine their skills in terms of searching for a job. Students also develop a career plan, beginning with an entry-level position for those who have worked in the industry or a next-level position for students currently working in the area. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-2 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 511 or LAW 598 (Strategic Career Planning) |
| SLB | 512 | Professional Sports Law | Studies law, revenue, branding and problem solving in the professional sports context, focusing primarily on professional sports league governance and regulation, labor relations, representing and marketing players and coaches, and issues of equity and race. Also examines international issues related to professional sports. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 512 or LAW 691 (Professional Sports Law) |
| SLB | 513 | Sports Law and Business | Studies law, policy and problem solving in the context of the sports industry at all levels. Exposes professional, amateur and international sports law issues, examining those issues in a problem-focused manner. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student |
| SLB | 514 | Contracts: Negotiation and Drafting in the Sports Industry | Provides a working or basic knowledge of contract law, with in-depth instruction with regard to negotiating and drafting in the sports context. As their final project, students select a player, coach, university or club and then negotiate a contract. Negotiation sessions are held during class sessions and students evaluate each other, as well as receiving evaluation from the professor. Replicates the negotiation process in the sports industry. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 514 or LAW 598 (Contracts in the Sports Industry) |
| SLB | 515 | Sports Business Strategy and Industry Dynamics | Sports can involve a jog around campus or big business. Sports are interesting, important and a vivid context to learn about consumers, organizations, diverse stakeholders, media and entertainment, partnerships and sponsorship, highly competitive strategies in finance and marketing, managing community venues, big events, and other relevant business topics. Maintains a pragmatic, experiential, yet well-grounded focus, studying the role, nature and dynamics of sports business both in and around "sports industries" and in and around "conventional businesses." Builds and "tests" knowledge and exercise skills related to sports business analysis, decision making, communication and both strategy development and execution. Intellectually rigorous, yet fun. Develops a sophisticated, yet practical understanding of the nature, contexts and dynamics of sports business. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 515 or MKT 591 (Sports Business Strategy and Industry Dynamics) |
| SLB | 516 | Sports Business Development | Develops an appreciation for and understanding of the multiple stakeholders and diverse interests in and around sports business, and of their constantly changing and interactive impact on sports business practice and performance. Gives broad exposure to the major revenue generating domains in the sports industry. Explores the fundamentals of marketing and applies those fundamentals to the domains of sponsorship, endorsement, media, ticketing, merchandising and fundraising as means to create and maintain revenue streams. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 516 or MKT 591 (Sports Business Development) |
| SLB | 517 | Marketing for Sports Organizations | Studies the role, nature and dynamics of sports business and builds knowledge and skills related to sports marketing analysis, decision making and strategy development and execution. Intellectually challenging and demanding, yet fun. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 2-4 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 517 or MKT 598 (Sports Marketing) |
| SLB | 518 | Sports Analytics | Develops and applies analytical skills that are useful in nearly every career. Although the course focuses on applications in the sports context and uses approaches that are rapidly becoming important in the business of sports analytics, this is not a survey course about issues in sports. Instead, this class is about curiosity, storytelling and logic. An understanding and interest in both sports and numbers make this class good. General curiosity makes it great. | N | LEC | N | GNA | College of Law | Sandra Day O'Connor College of Law | 1-3 | | Prerequisite(s): College of Law student; Credit is allowed for only SLB 518 or MKT 591 (Sports Analytics) |
| SLB | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic or writing a literature review of a topic. | Y | REC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLB | 591 | Seminar | A small class emphasizing discussion, presentations by students and written research papers. | Y | SEM | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SLB | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLB | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | College of Law | Sandra Day O'Connor College of Law | 1-4 | | |
| SLB | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Law | Sandra Day O'Connor College of Law | 1-12 | | |
| SLC | 120 | Introduction to Chinese Culture | Introduces geographical, historical, literary, and intellectual premises of Chinese culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisites: ENG 101, 105, or 107; credit is allowed for only CHI 120 or SLC 120 |
| SLC | 140 | Greek and Latin Roots in Bioscientific Terminology | Introduces students to the ancient Greek and Latin root words most commonly used in biological, medical, and other scientific terminology, and gives practice identifying them in context. The knowledge of these root words enables students to memorize with greater ease and increased retention the bioscientific terminology they encounter in other coursework as well as in their medical or scientific profession. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 142 | Ancient Greek Civilization | Ancient Greek civilization and culture. Studies (in roughly equal parts) the art, archaeology, literature, culture and history of ancient Greece from prehistoric times until after the conquests of Alexander the Great (the Hellenistic Age). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H | Credit is allowed for only GRK 142, GRK 194 (Ancient Greek Civilization) or SLC 142 |
| SLC | 144 | The Ancient Mediterranean | Provides a comprehensive introduction to the Mediterranean world, focusing on (but not limited to) the period of the classical Greeks and Romans. Provides some history of the area, but focuses on the classical world and its interaction with the cultures that surrounded it, including Semitic, Near Eastern, and North African cultures, as well as some of the lost cultures of the area such as the Minoans and Etruscans. Introduces the sources that provide information about these cultures (literary, art historical and archaeological sources), and teaches students to think critically and write persuasively about these sources. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101, 105, or 107 with C or better; Credit is allowed for only SLC 144 or SLC 194 (The Ancient Mediterranean) |
| SLC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisites: maximum 25 hours |
| SLC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 201 | Introduction to Linguistics | Examines the nature and diversity of world languages, linguistic structures and functions of language, language variation, pragmatics, and language acquisition. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU or SB | |
| SLC | 202 | Introduction to Literary and Cultural Theory | Interdisciplinary approaches to understanding culture and cultural production (literature and critical theory, film, visual art, and performance, among others) in different cultures and regions. Classes are taught by a primary instructor aided by several guest lecturers in their area of academic specialization. | N | REC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 102, 105, or 108 with C or better |
| SLC | 221 | Survey of Ancient Greek Literature | Introductory survey of ancient Greek literature. Familiarizes students with the important literary genres, texts, and authors of the ancient Greeks from Homer to the Hellenistic period. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only GRK 221, SLC 221 or 294 (Ancient Greek Literature in Translation) |
| SLC | 222 | Survey of Roman Literature | Introductory survey of Roman literature. Familiarizes students with the literary genres, texts and authors of the Romans from the origins of the Latin language to the Silver age. All readings in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only LAT 222, SLC 222, LAT 294 (Roman Literature in Translation) or SLC 294 (Roman Literature in Translation) |
| SLC | 223 | Introduction to Greek and Roman Mythology | Familiarizes students with the characters and events of ancient Greek and Roman myths through their literary manifestations, and moves beyond mere narrative to consider the possible interpretations and functions of these myths, thus revealing the central concerns of ancient society and giving insights into the working of our own society and its literary and artistic traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Credit is allowed for only GRK 223, LAT 223, SLC 223, GRK 294 (Greek and Roman Mythology) |
| SLC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |

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| SLC | 321 | Korean Literature in Translation | Introduces various genres of Korean literature written from the seventeenth century to the present in English translation. Aims to help students to understand the history of modern Korean literature in transnational and transdisciplinary contexts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Credit is allowed for only KOR 294 (Korean Lit in Translation), 321, 394 (Korean Lit in Translation) or SLC 321 |
| SLC | 323 | Russian Literature and Revolution: The Twentieth Century | An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskaia, and other writers. Taught in English. An in-depth study of 20th-Century Russian prose and poetry by Zinovieva-Annibal, Gorky, Bely, Babel, Mayakovsky, Platonov, Pasternak, Erofeev, Petrushevskaia, and other writers. Taught in English. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Pre-requisites: ENG 102, 105, or 108; Credit for RUS 323 or SLC 323 |
| SLC | 333 | China | Political, economic, social, and cultural history of the Chinese people from early times to the 17th century. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 333, HST 383 or SLC 333 |
| SLC | 335 | History of Chinese Medicine | Explores developments of Chinese traditions dealing with the natural world, science, and medicine. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only CHI 335, HPS 325, HST 385 or SLC 335 |
| SLC | 336 | Interpreting China's Classics | Study of selected Confucian and/or Taoist classics and ways they have been read in both Asian and Western scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 30 hours; Credit is allowed for only CHI 336, HST 386 or SLC 336 |
| SLC | 344 | Classics and Comics | Explores the connections between the classical tradition of Ancient Greek and Roman literature and the modern American superhero comic book tradition. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GRK 344 or LAT 344 or SLC 344 or GRK/LAT/SLC 394 (Classics and Comics) or SLC 494 (Classics and Comics) |
| SLC | 347 | Modern Israeli Literature in Translation | Modern Hebrew, or Israeli Hebrew, started at the end of the 19th century in Europe and today it is the language of the State of Israel. During this short period modern Hebrew developed literature with its unique local characteristic, as well as universal ideas. Reads and examines four books against their social and historical background. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GRK 347 or JST 347 or SLC 347 or ENG/HEB/JST/SLC 394 (Modern Hebrew Literature in Translation) |
| SLC | 348 | Israeli Society and Culture | Different partitions of the Israeli society, based on ethnic origin, by religious affiliation or by political association. Depicts how Israel is an absorbing immigration state. Israel is a welfare state and the course covers aspects of a welfare state, such as health, retirement, public transportation, art, higher education and more. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only HEB 348 or LAT 348 or HEB 394 (Israeli Culture and Society) or JST 348 or REL 311 or SLC 348 |
| SLC | 360 | Greece and Rome at War | Familiarizes students with the major battles, leaders and tactics of Classical Greece and Rome. Supplements lectures with student participation including study of original sources, group presentations, and gaming battle simulations. This multifaceted approach gives a greater sense of the evolution of the leaders, armies and tactical systems of the Greeks and Romans. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 360, HST 397, LAT 360, SLC 360 or SLC 394 (Greece and Rome at War) |
| SLC | 361 | Roman Religion | Roman religion was never static, despite the best efforts of the Roman state to make it so. Understands the artifacts and procedures of Roman state cult from its earliest origins to the late empire, using ancient literary sources, archaeology throughout the ages and modern scholarly theories. Clarifies the forces that influenced development and change in Roman religion, both internal and external. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only LAT 361, REL 361, SLC 361 or SLC 394 (Roman Religion) |
| SLC | 362 | Ancient Greek Religion | Surveys ancient Greek religion, including its gods, ritual practices and festivals. Analyzes the development of the religion over time, and how both ancient and modern figures interpreted its meaning. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; Credit is allowed for only GRK 362, REL 360, SLC 362 or SLC 394 (Ancient Greek Religion) |
| SLC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 401 | Translation Theory and Practice | Translation theories and professional practices and ethics; bibliography, computer technology, and sample texts for natural and social sciences and humanities. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 420 | Foreign Literature in Translation | Not for language majors (except in Asian languages and Russian); open to language majors as a related-area course. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | |
| SLC | 421 | Japanese Literature in Translation | Readings selected by theme or genre or period from various works of Japanese literature in English translation. May be repeated when topics vary. Graduate students by permission. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | |
| SLC | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |

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| SLC | 439 | Art in Exile: Vladimir Vladimirovich Nabokov | In English. The scandalous success of Lolita (1955) allowed Vladimir Nabokov to retire from teaching at Cornell University and move to Switzerland to devote himself to fiction, translation, criticism and lepidoptery. This was only one of the many metamorphoses that Nabokov, a Russian noble, underwent while in exile, moving from Russia to the Crimea, Cambridge UK, Berlin, Paris, Cambridge MA, Ithaca, Hollywood and finally Montreux. Examines the Russian roots of Nabokov's Russian (in translation) and American novels about exile: his first novel, Mary (1926), The Defense (1929), Glory (1932), and his tribute to 19th-century Russian literature, The Gift (1938), which he considered his greatest Russian novel. These are followed by Lolita (1955), Prnin (1957) and Pale Fire (1962), his memoirs, Speak, Memory (1966), and some essays and short stories. Films include Lolita by Stanley Kubrick (1962) and Adrian Lyne (1997). | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Credit is allowed for only RUS 439 or SLC 439 or ENG/RUS/SLC 494 (Art in Exile: Vladimir Vladimirovich Nabokov) |
| SLC | 440 | Film Theory and Criticism | Examines the major positions and issues in film theory from an historical perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): ENG 102, 105 or 108 with C or better; FMS 100 with C or better; Credit is allowed for only FMS 461 or SLC 440 |
| SLC | 441 | Fairy Tales | Foundational fairy tale texts collected by the Brothers Grimm and written by Hans Christian Andersen and their modern permutations reflect basic human desires, fears and aspirations as well as the values of the period in which they are written. These stories and their variants in popular culture across the globe permit students to reflect critically on the functions of fairy tales in both past and present civilizations. Students perceive the ways in which ancient tales can be utilized for various purposes and understand the contemporary theoretical debate on the study of fairy tales and their role in popular culture. Course taught in English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Prerequisite(s): ENG 102, 105 or 108 with C or better; one other ENG or GER upper-division course with C or better. Credit is allowed for only GER 441, GER 494 Fairy Tales, or SLC 441 |
| SLC | 444 | Heroes, Ancient and Modern | Explores the heroic literature of the ancient Greeks and Romans, then traces the classical tradition and reception of the classical hero in medieval and modern texts. Incorporates history, art history and material culture from the relevant societies to supplement study of the texts involved. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Pre-requisite: ENG 101, 105 or 107 with C or better; Credit is allowed for only GRK 444, LAT 444, SLC 444 or SLC 494 (Heroes: Ancient and Modern) |
| SLC | 445 | The Holocaust in German-Mediated Memory | Examines representations of the Holocaust from across different media (literature, film, architecture, memoir, photography) and from across multiple generations of German engagement with this period in history. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 445 or GER 445 or JST 445 or SLC 445 or GER 494 (Holocaust and German Media or Holocaust and German Mediated Memory) |
| SLC | 446 | Weimar-Era German Film | Examines early film production in Germany during the period of the Weimar Republic. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only FMS 446 or GER 446 or SLC 446 or GER 494 (Weimar German Cinema) or GER 494 (Studies in German Film) |
| SLC | 447 | German Modernism | Examines examples of modernism in literature, art and film from German-speaking Europe. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200 or 201 or 202 or 204 or FMS 100 or 200 or SLC 202 with C or better; Credit is allowed for only GER 447 or SLC 447 or GER 494 (German Modernism) |
| SLC | 450 | Experimental Narrative | Examines texts that experiment with form, content and narrative perspective within print, film and digital media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 200; one ENG 200-level literature course, or SLC 202 or FMS 100 and FMS 200; Credit is allowed for only ENG 447, FMS 442 or SLC 450 |
| SLC | 451 | Chinese Cultural History I | China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 451, HST 451 or SLC 451 |
| SLC | 452 | Chinese Cultural History II | Evolution of Confucian thought, its synthesis with Taoism and Buddhism, and modern reactions against, and uses of, Confucian traditions. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB & G & H | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 55 hours; Credit is allowed for only CHI 452 or HST 452 or SLC 452 |
| SLC | 455 | Multi-Kulti: Multiculturalism Through Film | Examines how ethnic identities are perceived, constructed and marketed as well as how they perceive themselves and the "others." Critically engages with such concepts as migration, assimilation, citizenship, hybridity and authenticity. Focuses on exemplary films, including comparisons with minority experiences in other countries. Through film and other material on the topic, will learn to contextualize recruitment of guest workers, xenophobia and racism, citizenship law, immigration and national identity, the institutions of multiculturalism, religion, the private sphere, multilingualism, popular culture and globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): ENG 101 or 105 or 107 with C or better; Credit is allowed for only GER 455 or SLC 455 or GER 494 (Multi-Kulti: Multiculturalism in Central Europe) or SLC 494 (Multi-Kulti: Multiculturalism in Central Europe) |
| SLC | 479 | Introduction to Teaching Foreign Languages | Introduces teaching methodologies, language learning, and current best practice in teaching foreign languages in U.S. middle and high schools. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

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| SLC | 480 | Methods of Teaching Foreign Languages | Teaching foreign languages and literatures at secondary and college levels. Does not meet the Liberal Arts and Sciences General Studies requirement for humanities and fine arts. Required for admission to SED 478. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 479 with C or better |
| SLC | 481 | Technical and Scientific Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as engineering, architecture, agriculture, computer technology, electronics, and physical and biological sciences. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 482 | Business and Financial Translation | Resources, practices, strategies, and lexicon for translation of professional texts in subjects such as economics, finance, insurance, management, marketing, accounting, advertising, and real estate. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 401 |
| SLC | 483 | Medical and Legal Translation | Resources and strategies for translation of professional texts in subjects such as medicine, nursing, public health, criminal justice, and international law. | N | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SLC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 491 | Crossing Languages and Cultures | Interdisciplinary and cross-cultural study in two or more world languages or cultures. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SLC 201 and 202 with C or better |
| SLC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | Pre-requisite: minimum 56 hours |
| SLC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLC | 515 | Second-Language Acquisition | Discusses and applies theories of second-language acquisition. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SLC 400 |
| SLC | 551 | Global Approaches to Translation | Familiarize students with various approaches to translation practice. Examines issues related to the cultural role of translation. Students [re]prepare a translation, justification of translation choices, and discussion of the complexities posed by the translation. Readings address a broad array of translation theories, with most focused on translation as a globally theorized phenomenon in the 20th and 21st centuries. Readings and discussions focus on how one translates, and on translation as a culture-making enterprise inextricably tied to the questions of who translates, in what context, for whom, and to what ends. Students understand translation theories from different eras and cultures; understand how translation is implicated in different forms of intercultural contact (colonialism, commerce, proselytization); gain experience translating texts from a source language into English; and can explain why they translated the way they did. | N | RSC | N | GNA | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SLC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLC | 602 | Literary and Cultural Theory | Trains SILC Ph.D. students in understanding the central role of languages and literatures in the composition of culture. Employs a range of interdisciplinary approaches to various forms of cultural production, specifically as they relate to language, literature, film, visual art, and performance. Through exploration of primary works and foundational theoretical texts, shows students how to question the motivations, aesthetics, transmission, reception, and social control of a variety of works and media. At the center of this analysis stand the critical debates about the nature and definition of the term culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SLC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLV | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 304 | Computational Linguistics of Slavic Languages | Information technology and Slavic languages, including Web design, digitalized resources, information retrieval, math/statistical analysis, and PERL. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | CS | |
| SLV | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 440 | History of Slavic Languages | Comparative evolution of East Slavic, West Slavic, and South Slavic languages from the earliest record to the standardizing of national languages in the 19th and 20th centuries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | SB | |
| SLV | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SLV | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SLV | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SLV | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SLV | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SLV | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SLV | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SMC | 520 | Methods and Tools in Applied Cognitive Science | Provides a hands-on approach to understanding and using advanced methodologies commonly implemented in the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 521 | Methods and Tools in Simulation and Modeling | Introduces specific methods and tools used in the field of modeling and simulation, with computer-based experience through both writing and using simulation software. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 540 | Foundations of Applied Cognitive Science | Provides a critical background in the theory and organization of the field of cognitive science. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 541 | Foundations of Simulation and Modeling | Introduces a wide variety of methodologies utilized by and applications of the broad field of simulation and modeling. | N | SEM | N | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Ira A. Fulton Engineering | Human Systems Engineering | 1 | | |
| SMC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-4 | | |
| SMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Human Systems Engineering | 1-12 | | |
| SMC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | |
| SMC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Human Systems Engineering | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 101 | Introductory Sociology | Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | Pre-requisites: Freshmen; maximum 25 earned hours |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 210 | Sociology of Murder | Sociological perspectives on various forms of murder and types of murderers. Also considers forms of punishment for murder. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only FOR 210 or SOC 210 |
| SOC | 220 | Sport and Society | Examines sports in American society as a source of socialization and an institution where gender, race/ethnicity, and class interact. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 241 | Modern Social Problems | Race relations, poverty, unemployment, and other current issues. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| SOC | 264 | Gender and Society | Analysis of the development, nature, and consequences of gender in contemporary society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only FAS 264 or SOC 264 |
| SOC | 270 | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | |
| SOC | 270 | Racial and Ethnic Relations | Problems of minorities in heterogeneous societies. Evaluates theories of prejudice and research dealing with discrimination, desegregation, and assimilation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | |
| SOC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 301 | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 301 | Principles of Sociology | Intensive and critical analysis of the concepts of sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only SOC 101 or 301 |
| SOC | 312 | Adolescence | In-depth examination of the developmental and social processes that help explain modern adolescence. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101 or FAS 330 with C or better; Credit is allowed for only CDE 312 or SOC 312 |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 315 | Courtship and Marriage | In-depth study of courtship, marriage, and related processes, focusing on problematic aspects of these institutions from the sociological perspective. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 321 | Sociology of Work | Social and cultural analysis of industry. Occupational roles, status, and social participation of workers. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | 324 | Work and the Workplace | Historical and comparative examination of changes in the structure and meaning of work and current shifts in people's work lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Credit is allowed for only FAS 324 or SOC 324 |
| SOC | 328 | Migration and Culture | Examines migration and culture embedded in a transnational field of social, economic and political processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours. Credit is allowed for only ASB 340 or SOC 328 |

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| SOC | 331 | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | 331 | Environmental Sociology | Analyzes human organizational responses to population growth, technological change, and environmental stressors on both a national and global scale. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Prerequisite(s): minimum 45 hours |
| SOC | 332 | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 332 | The Modern City | In-depth analysis of the growth, characteristics, and problems of the modern city. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | Pre-requisites: minimum 24 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 333 | Population | Global trends in population growth, composition, and distribution; theories, policies, and impact of population trends on environmental quality and development. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 334 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisite: Minimum 45 hours: Credit is allowed for only ASB 344 or SOC 334 |
| SOC | 334 | Technology and Society | Development of technology in relation to society, work, science, the environment, public health, and cultural values related to social change. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | L or SB | Pre-requisite: Minimum 45 hours: Credit is allowed for only ASB 344 or SOC 334 |
| SOC | 339 | Grassroots Social Movements | Explores how groups mobilize collectively to produce social, political, economic, and cultural change, with an emphasis on the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: ENG 101 (or 105 or 107) with C or better; Credit is allowed for only ASB 339, POS 339 or SBS 339 or SOC 339 |
| SOC | 340 | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | 340 | The Sociology of Deviance | Sociological analysis of stigmatized behaviors and conditions, including the causes, effects, and management of stigma. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisite: SOC 101 or 301 |
| SOC | 342 | Mexico-U.S. Borderlands | Contemporary examination of socioeconomic and political dimensions of border communities, and formation of Mexican-origin communities within and outside the Southwest. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & C | Credit is allowed for only ASB, SBS or SOC 342 |
| SOC | 350 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G & H | |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G & H | |
| SOC | 352 | Social Change | Patterns of social change, resistance to change, and change-producing agencies and processes. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G & H | |
| SOC | 353 | Death and Dying in Cross-Cultural Perspective | Scientific and humanistic approaches to the study of death and dying from the perspective of anthropology and allied disciplines. Uses a global, comparative approach across space and time from the earliest human burials to contemporary funeral events. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3-4 | (HU or SB) & G | Pre-requisite: 45 earned credit hours; Students who have credit for ASB 353, may not enroll in SOC 353 |
| SOC | 356 | Central American Studies | Part of the summer ASU study abroad Costa Rica Program, which is a language and social sciences immersion program in the capital city, San Jose. A summer offering permits students to enroll in the program without conflicting with full course loads during the fall or spring semester. However, the course is proposed as a stand-alone course that can be offered in a regular semester as well. May be repeated once for credit. | N | REC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 360 | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | 360 | Sociological Psychology | Interaction patterns between the sociocultural order and individuals; socialization process; norms, roles, and statuses; collective behavior. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: Minimum 24 hours; SOC 101, PSY 101(PGS 101), FAS 101, or FAS 330 with C or better |
| SOC | 363 | Men and Masculinity | Sociological analysis of how masculine identity is defined, negotiated, and variously constructed depending upon class, ethnicity, age, and sexual orientation. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 364 | Popular Culture and Society | Studies the social approaches to popular culture, focusing on the function of various forms (literature, film, theatre, and music). | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 365 | Sociology of Mass Communication | Sociological exploration of the major mass media as a communicative process in American society. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 366 | Film and Society | Studies the social approaches to film as an art form, mass medium, and ideological construct. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|-------------------------------|----------------------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SOC | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 or 102, SOC 101, SOS 110, or SSH 100 with C or better. Credit is allowed for only ASB, SOC, SOS, or SSH 370 |
| SOC | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB or SOC 371 |
| SOC | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only ASB or SOC 371 |
| SOC | 374 | Cultures and Politics of the Internet | Explores the culture and politics of the Internet in global perspective, including virtual communities, free software, copyleft, blogs, and hacktivism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Credit is allowed for only ASB 374, POS 374, SBS 374 or SOC 374 |
| SOC | 375 | Contemporary American Jewish Identities | Analyzes the complexity and diversity of the contemporary American Jewish community in religious and secular affairs. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | (HU or SB) & C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 24 hours; Credit is allowed for only JST 318, REL 318 or SOC 375 |
| SOC | 378 | Migration and Society | Application of social scientific theories and principles in order to understand the social and ethnic consequences of international migration with a focus on the United States. Students will communicate views formulated from empirical evidence and reasoned analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & C | Prerequisite(s): ASB 102 or SOC 101 with C or better; 45 minimum hours |
| SOC | 389 | Ethnographic Field Lab | Hands-on, guided ethnographic qualitative research and interpretative analysis. May be repeated for credit when topics vary. Fieldwork practicum. | N | LAB | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | |
| SOC | 390 | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | |
| SOC | 390 | Social Statistics I | Descriptive and inferential statistical methods for analysis of social data. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | CS | Pre-requisite: MAT 142 or higher |
| SOC | 391 | Research Methods | Methods of social science research, including the fundamental assumptions underlying research, critique, research design, data collection, and data analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Prerequisite(s): SOC 101 or SOC 301 or CDE 232; SOC 390; Credit is allowed for only FAS 361 or SOC 391 |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 400 | Perspectives on Aging | Broad overview of gerontological issues; e.g., physical aging, retirement, living options, caregiving, theoretical background, death. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 415 | The Family | Family considered from the institutional viewpoint; in-depth look at its historical development and its adaptation to a changing culture; analysis of the family system in many cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | 418 | Aging and the Life Course | Examines aging as a process of change and adaptation over the lifespan, patterned by social, cultural, and historical forces. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & H | Pre-requisites: FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better; minimum 30 hours. Credit is allowed for only CDE 418 or SOC 418 |
| SOC | 419 | Organizations and Technological Change | Explores the increasing impact of information technology on corporate, governmental, and private organizations. May involve fieldwork. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | G | |
| SOC | 420 | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L or SB | |
| SOC | 420 | Sociology of Religion | Interrelationship of culture, society, and religion; religion and social stratification; religious, economic, and political institutions; social change and religion. Emphasizes American society and institutions. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | |
| SOC | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| SOC | 421 | Education and Society | Uses contemporary sociological perspectives to examine effects of schools and schooling on individuals and society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |

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| SOC | 424 | Women and Health | Women as healthcare workers and an in-depth analysis of issues of health, illness, and healthcare for women | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: minimum 30 hours; FAS 101, 330, PSY 101(PGS 101) or SOC 101 with C or better |
| SOC | 426 | Social Inequality | Examines stability and change in social inequality based on class, race and gender, and in the context of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 426 | Social Inequality | Examines stability and change in social inequality based on class, race and gender, and in the context of globalization. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | |
| SOC | 427 | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 427 | Sociology of Health and Illness | Social aspects of illness and sociological analysis of the healthcare system and its practitioners. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 433 | Applied Demography | Science of population analysis. Covers techniques for measuring fertility, mortality, migration, and population composition. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | |
| SOC | 435 | Advanced Marriage and Family Relationships | In-depth examination of research, issues, and trends relating to marriage and family interaction. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | L or SB | Pre-requisites: Minimum 30 hours; FAS 101, 331, PSY 101(PGS 101) or SOC 101 with C or better; Credit is allowed for only FAS 435 or SOC 435 |
| SOC | 443 | Sociology of Corporations | Examines corporations as social institutions and the implications of their status as a legal person on politics, culture, and economy. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 445 | Globalization, Development, and Resistance | Explores the interconnections among globalization, development, and grassroots movements for social change in Africa, Asia, and Latin America. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 448 | Epidemics and Society | How epidemics occur; how they are perceived in society; how epidemics affect society. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 451 | Comparative Sociology | Cross-cultural study of basic social institutions; the methodology of cross-cultural research. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB & G | |
| SOC | 456 | Political Sociology | Social factors associated with voting; nature and structure of the electorate and political parties and the nature of national and international power structure. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | |
| SOC | 457 | Global Social Movements | Examines how groups mobilize across borders to pursue social goals, including equality, justice, peace, and salvation in a global context. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB & G | |
| SOC | 460 | Leadership, Research, and Collaboration in Community Change | First course in Community Action Research Experience (CARE) sequence. Students develop a project proposal in collaboration with a community-based organization. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only FAS 460, SOC 460 or FAS 498 (Leadership Research & Collaboration in Change) |
| SOC | 461 | Community Action Research Experience Research Internship | Second course in Community Action Research Experience (CARE) sequence. Students apply leadership, professional collaboration, project management and research skills in conducting an approved community action research project. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisite: FAS 460 (or SOC 460); Minimum 60 hours. Credit is allowed for only FAS 461 or SOC 461 |
| SOC | 483 | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 483 | History of Social Thought | Social thought in human culture. Background of modern sociology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| SOC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 486 | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | 486 | Contemporary Theory | Contemporary issues and crises in social theory with major focus on particular theorists. Ideological factors in theory, philosophical issues, the nature of theory and its relationship with methodology. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | SB | Pre-requisites: SOC 101 or 301 |
| SOC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| SOC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | |
| SOC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | |
| SOC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-7 | | |
| SOC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-7 | | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-3 | | |
| SOC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-3 | | |
| SOC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 501 | Social Statistics | Understands and uses statistics for applications in the social sciences. | N | LEC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only CDE 501, SOC 501 or SOC 598 (Statistics for Social Sciences) |
| SOC | 505 | Applied Regression Analysis | Multiple linear regression topics relevant to social science data analysis. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 505; Graduate students only (degree and non-degree) |
| SOC | 507 | Categorical Data Analysis | Logistic regression and related topics relevant to categorical data analysis in social sciences. Computer applications. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 507; Graduate students only (degree and non-degree) |
| SOC | 508 | Structural Equation Analysis for the Social Sciences | Theory and application of structural equation modeling. Path analysis and latent variable models such as CFA, multiple group analysis and models for longitudinal data. Projects involve conducting analyses and writing results. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 508; Graduate students only (degree and non-degree) |
| SOC | 509 | Event History Analysis | Proportional hazards models and other methods for analyzing longitudinal data and establishing hazard rates of events for exploratory variables. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites:Credit is allowed for only FAS or SOC 509; Graduate students only (degree or non-degree) |
| SOC | 512 | Secondary Data Analysis | Works with existing data to produce a publishable article. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Pre-requisites: Credit is allowed for only FAS or SOC 512; Graduate students only (degree or non-degree) |
| SOC | 515 | Studies of the Family | Current developments in the study of marriage and the family. | N | LEC | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 516 | Family Demography | Current developments in the study of family demography. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 523 | Social Stratification | Overviews significant themes, issues, and bodies of work in the field of social stratification, a fundamental topic of sociological inquiry. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 533 | Demographic Methods | Emphasizes methods and techniques in demographic analyses such as life tables. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | |
| SOC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 585 | Sociological Theory | Analyzes major sociological theories, from classical to contemporary. | N | SEM | N | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SOC | 586 | Capstone I | Professional exploration and goal specification for non-thesis capstone project. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): 3 hours in any CDE, FAS or SOC 500-level course with C or better; Credit is allowed for only FAS 586 or SOC 586 |
| SOC | 587 | Capstone II | Develops professional expertise and area of focused interest. | N | RSC | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): FAS 586 or SOC 586. Credit is allowed for only FAS 587 or SOC 587 |
| SOC | 588 | Capstone III | Applies developed expertise and knowledge to professional goal. | N | PRA | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): CDE 501 or SOC 501; CDE 531 or SOC 585; FAS 500 or SOC 500; FAS 587 or SOC 587; 12 additional graduate-level hours in CDE, FAS, and/or SOC; Credit is allowed for only FAS 588 or SOC 588 |
| SOC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | |
| SOC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 603 | Perspectives in Sociological Inquiry | Provides an overview of core theoretical frameworks and associated analytic approaches in sociology. Taught by faculty members from across the university with sociological training or research interests, providing students with foundational and advanced research tools as well as introducing them to ongoing research at ASU, the distinctive contributions of sociological perspectives to inter- and transdisciplinary projects, and potential opportunities for research residency. | N | SEM | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 685 | Applied Social Theory | Overviews main classical and contemporary theoretical paradigms and concepts in sociology and provides advanced training on using them to build empirical analytic models. Students identify theoretical perspectives appropriate for research questions, build corresponding conceptual frameworks, and formulates testable hypotheses. Seminar format and therefore students' active participation is expected. | N | SEM | N | GNA | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |

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| SOC | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | |
| SOC | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOC | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | Sanford School of Social and Family Dynamics | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 100 | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | 100 | Introduction to Sustainability | Introduces basic concepts, global trends, and local responses, philosophical, ethical, and cultural dimensions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | G | Pre-requisites: Not open to Sustainability majors or majors with a Sustainability concentration |
| SOS | 101 | Introduction to Applied Mathematics for the Life and Social Sciences | Introduces quantitative techniques as applied to problems in the life and social sciences. Includes challenges like understanding the complexities of the human genome or the implications of globalization for infectious disease, human health, and economic stability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | MA | Prerequisite(s): MAT 117 with C or better (or MAT 194: EFM with skills mastered for MAT 142 if completed) OR Mathematics Placement Test with a score of 32% or higher; Credit is allowed for only AML 100 or SOS 101 |
| SOS | 110 | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | SB | |
| SOS | 110 | Sustainable World | Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | SB | |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 111 | Sustainable Cities | Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (HU or SB) & G | Credit is allowed for only PUP 190 or SOS 111 |
| SOS | 117 | Food System Sustainability | Food systems are particularly important for human societies to sustain and are also particularly vulnerable to multiple threats related to the interconnected sustainability challenges we face. Introduces the concepts and issues involved in food systems sustainability. Divided into four modules, the first three of which address the other systems with which food systems interact—socio-ecological, socio-cultural and socio-technical systems. The final module addresses the future of food systems. Teaches students about the main issues in food system sustainability and allows students to enhance their critical thinking skills by applying them to the many sustainability challenges associated food system activities via solutions-based learning including the social, ecological, economic and institutional dimensions. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | |

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| SOS | 171 | The Thread of Energy | Follows the thread of energy through every aspect of our lives. Discusses the technical, social, legal, and policy contexts of all energy resources, including present and unconventional fossil fuels, nuclear power, and renewable resources. Addresses energy use throughout history, the influence of energy on quality of life, the role it plays in political strategies and environmental quality, how it shapes our neighborhoods and cities, its contribution to our personal comfort and national security, and how its importance is reflected in the worlds of business and the humanities. Its dual role is as a stand-alone introduction to energy, and as a first step to more advanced studies of energy in the natural, technical, and social sciences. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | SB & G | Credit is allowed for only GCU or SOS 171 |
| SOS | 181 | Technological, Social, and Sustainable Systems | Introduces the importance and role of technological, social, and sustainable systems in the modern world. Provides a framework for the theory and practice of sustainable engineering. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | HU | Credit is allowed for only SOS, FSE or CEE 181 |
| SOS | 182 | Water Planet | Overview of the processes that control water supply to natural ecosystems and human civilizations. Part I introduces the basic science that helps us understand the water planet, including the hydrologic cycle, glaciers and ice; rivers, oceans, and natural hazards associated with water such as flooding, landsliding and tsunamis. Part II covers some of the management and resource allocation topics that face humanity today, including droughts, groundwater contamination, impacts on fisheries, conflicts over water, patterns of water use, and effects of global climate change on future water supplies. Uses water issues facing Arizona and California as examples. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | SQ | Credit is allowed for only GLG 108 or SOS 182 |
| SOS | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | GRD | School of Sustainability | School of Sustainability | 1-3 | | |
| SOS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | |
| SOS | 201 | Introduction to ASU and Sustainability | Introduces all ASU transfer students to the unique elements, culture, challenges and opportunities of the university. | N | LEC | N | YGB | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: Sustainability major; Minimum 24 hours |
| SOS | 210 | Mathematical Tools and Modeling for the Life and Social Sciences | Introduces the evaluation and construction of mathematical models used in the life and social sciences. Includes the basic steps in developing a model, analyzing it, and testing it with actual data. Covers the first steps concerning how to use formal mathematical techniques including developing equation-based relationships, plotting graphs, linear regression, and solving equations using computer software. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite: AML 100 or SOS 101 with C or better (with B or better if Sustainability major). Credit is allowed for only AML 253, SOS 210 or 294 (Intro to Math Tools & Modeling) |
| SOS | 211 | Calculus and Probability for the Life and Social Sciences | Introduces two of the most important and useful mathematical frameworks used to study natural and social phenomena: probability and calculus. Probability is used to describe an attitude of mind toward some proposition whose truth is not certain. Calculus is the branch of mathematics used to study the behavior and dynamics of functions; calculus is the mathematical study of change. Students gain the basic competence needed for applying probability and calculus when thinking about and research problems in sustainability. Focuses on and discusses applications, the meaning of important concepts, the origins of the rules of derivation and integration, and logic behind why the methods work. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | MA | Pre-requisite: AML 100 or SOS 101 with B or better |
| SOS | 220 | Systems Thinking | Introduces systems thinking and complexity science, with an emphasis on analytical relevance for thinking about a myriad of issues involved in sustainability. Hones students' abilities to read critically, articulate their views clearly, and think about the many systems that shape their lives. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 230 | Professional skills in Sustainability | Builds interpersonal competence, which is a key competence in sustainability. Students work on a small hands-on sustainability project in order to practice professional skills in four domains: teamwork, project management, self-directed and continuous learning, and stakeholder engagement. Students learn how to effectively collaborate in teams, use project management tools to achieve quality products in time, innovate their ways of learning, and create productive dialogue with stakeholders. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |

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| SOS | 231 | Careers in Sustainability | Aids in career exploration and development for School of Sustainability majors. Explores values, motivations and career options. Students learn how to approach the job search and how to communicate sustainability to employers; also how to prepare a quality résumé, cover letter, and gain a better understanding of the benefits of networking. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 1 | | Pre-requisites: BA or BS Sustainability major; Minimum 45 hours; PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 272 | Environmental Justice | Surveys key environmental justice issues and movements. Uses interdisciplinary social science perspectives to review and analyze U.S. and international environmental justice issues. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | SB | Credit is allowed for only ASB 272 or SOS 272 |
| SOS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 101 or AML 100 with C or better |
| SOS | 300 | Advanced Concepts and Integrated Approaches in Sustainability | Integrates disciplinary contributions to sustainability, teaches advanced concepts in sustainability, and explores methods for identifying sustainability challenges and generating solutions. Focuses on diversity of sustainability research, and integrates specialized approaches in sustainability. Advanced concepts in sustainability, including systems-thinking, complexity, nonlinearity, cascading effects, coupled natural-human systems, governance, future thinking, unintended consequences, normative concerns, transformation, power, participation, and equity. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sust minor with SOS 100 (or 110 or SOS 111/PUP 190) with C or better; 6 hrs from two Sust themes OR Civil and Environ Engineering major with a Sust conc OR Tourism major with a Sust Tourism conc OR Interdisc Studies major with a Sust conc |
| SOS | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| SOS | 309 | History and Philosophy of Sustainability | Examines sustainability issues in a broadly interdisciplinary way, but with a special emphasis on humanities perspectives, focusing on human ideas, values and institutions as they have evolved over time. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 25 hours; Credit is allowed for only HST 308 or PHI 322 or SOS 309 or BIO/HST/PHI/SOS 394 (History & Philosophy of Sustainability) |
| SOS | 310 | Equity, Justice and Sustainability | Introduces the "social justice" aspects of sustainability science and practice. Sustainability problems are a special class of problems arising from a complex set of issues spread across time, space and institutional scales. These problems can threaten underlying social, economic and ecological systems which are highly intertwined and interdependent. Explore these issues through study of both theory and practice. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 311 | Future Thinking and Strategies | Offers a critical introduction to future-oriented theories and methods. Explores anticipation in contemporary society through a series of cases studies that probe real-world sustainability issues and how the future is created and contested. By characterizing and critiquing future-oriented practices across governmental, academic and private sectors, offers a critical perspective on different methodological approaches and the implications of their use. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: PUP 190 (or SOS 111) and SOS 110 with C or better |
| SOS | 314 | Basic Energy Science | Explains the concepts of the science of energy for those without a background in engineering. Allows non-engineering students to better grapple with the issues that surround sustainable energy issues. Covers the most common methods of electricity generation as well as renewable technologies and fuels. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only SOS 314 or SOS 394 (Basic Energy Science) |
| SOS | 315 | Energy Policy | Examines the regulation of energy production and consumption in the U.S. at the federal, state and local levels. Identifies energy stakeholders in the U.S. and examines how they have shaped U.S. policies around energy. Explains past and current U.S. energy policies and how energy needs have shaped U.S. relations with other countries. Compares U.S. energy policies to that of other countries in the world, as well as how Arizona's energy policies compare to other states within the U.S. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only PAF 394 (Energy Policy) or POS 394 (Energy Policy) or SGS 315 or SGS 394 (Energy Policy) or SOS 315 or SOS 394 (Energy Policy) |
| SOS | 320 | Society and Sustainability | Establishes an understanding of the human, social, and cultural dimensions of sustainability from multi- and interdisciplinary perspectives and at a variety of spatial and temporal scales. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 321 | Policy and Governance in Sustainable Systems | Explores the wide array of political questions that are raised when we view the Earth's environment as an integrated, global system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 322 | International Development and Sustainability | Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability or Business (Sustainability) major; SOS 110 and 111 (or PUP 190) with C or better OR Non-Sustainability major with 2 courses with C or better: SOS 100, 110, 111 (PUP 190), SOS 300 |

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| SOS | 323 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 324 | Sustainable Energy, Materials, and Technology | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 325 | The Economics of Sustainability | Applies economic principles to the allocation of environmental goods and services, external environmental effects, and environmental public goods; decision-making under uncertainty, adaptation to and mitigation of environmental change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 326 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning, and the provisioning of ecosystem services; use of economic and other social science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 327 | Sustainable Food and Farms | Food systems and sustainability. Theories of food security, rural livelihood sustainability, and food sovereignty. Critically examines the social, ecological, economic, and institutional dimensions of the many sustainability challenges associated food system activities (production, processing, distribution, consumption, waste). Students develop a food system framework and apply knowledge to an assessment of the sustainability of one aspect of the local food system. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 328 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. Delves into more specific case studies of attempts by current businesses to become ?greener? and ?more sustainable.? exploring challenges and opportunities that are commonly found as well as how decisions are often made in today's business settings and by whom. Explores alternative enterprise models and examples of businesses that are using the current context to redefine the sustainability and enterprise. Given the emergent nature of this effort, uses timely and ?real-world? examples from current events where possible. Explores and applies an integrated approach to sustainability and enterprise. Readings include popular texts, original research articles and current events. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisite: Sustainability or Business (Sustain) major; SOS 110 and 111 (or PUP 190) with C or better; OR Non-Sustain major with 2 courses: SOS 100, 110, 111 (PUP 190), SOS 300 with C or better; Credit for only SOS 328 or 394 (Sustain and Enterprise) |
| SOS | 353 | Perspectives on the Western Diet: Food, Health and Sustainability | Hybrid course covering political, ethical, social and cultural issues inherent in the U.S. food system. Topics include examination of U.S. food guidance; the food system and food environment; the history of food and farm policy; food security and aspects of sustainability in relation to food system impacts on the health of humans, society and the environment. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only NTR 353 or NTR 394 (The Western Diet: Food, Health, & Sustainability) or SOS 353 |
| SOS | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | L or SB | Pre-requisites: ENG 102 (or ENG 105/108) with C or better; ASB 100 (or 102), SOC 101, SOS 110 or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SOS | 371 | Inequality and Sustainability | Efforts to shift societies onto a sustainable trajectory are facing profound challenges from the degree and dynamics of global inequalities of income, wealth, and life chances. Data and ideas from a spectrum of disciplines are employed to examine, analyze, and criticize the prospects for redressing global inequalities in a sustainable manner. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101, 105 or 107 with C or better; Minimum 45 hours completed; Credit is allowed for only ASB or SOS 371; Students who have received credit for ASB or SOS 394 (Inequality and Sustainability) may not enroll in SOC 371 |

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| SOS | 372 | Earth Science in Arizona and the Southwest | Place-based application of geology and allied Earth system sciences to explore and interpret the landscapes, rocks, geologic history, climate, resources, and natural hazards of Arizona and the Southwest. Integrates case studies of the interactions of Southwest cultures and societies (past and present) with Earth systems, and inquiry into the future sustainability of Southwestern communities and lifeways. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; GLG 101 (or GLG 102 or 110 or GPH 111 or SES 121); MAT 117 or higher. Credit is allowed for only GLG 301 or GLG 394 (Earth Sci in AZ & SW) or SOS 372 |
| SOS | 373 | Minerals, Energy, and Society | Studies the science and technology of the minerals and energy industries, how these industries interact with society, and how these interactions may change in the future. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: ENG 101 (or 105 or 107) with C or better; GLG 101 (or 102 or 110) or GPH 111 or SES 121 or Junior standing; Credit is allowed for only GLG 304, 394 (Minerals, Energy & Society) or SOS 373 |
| SOS | 374 | Earth's Critical Zone | The Earth's near surface environment (the "critical zone") supports most life and is the dynamic interface between the solid Earth and its fluid envelopes where much of the geologic record is produced. We now know that we face rapid climate change and the consequences of changes in land use, water resources, and ecosystems. Critical to planning a response to, or mitigation of, environmental change is understanding how the Earth surface works. Focuses on how changes to the environment manifest themselves in the critical zone--in the form and function of the Earth's surface (landforms, water resources, soils, ecosystems). Offers a quantitative introduction to the form and function of the processes impacting the Earth's critical zone to build an understanding of the interactions of physical, chemical and biotic processes in shaping the surface and determining fluid, solute and sediment fluxes. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisites with C or better: GLG 101 & 103 or SES 121 & 123; MAT 170 or 171 or 210 or 251 or 265 or 270; PHY 101 or 111 or 121 or 150 or CHM 101 or 107 or 113 or 114 or BIO 100 or 181 or 182 or 281 or 282. Credit is allowed for only GLG 327 or SOS 374 |
| SOS | 375 | Humans and the Environment: What's the Connection? | How do diverse human groups across global ecosystems (desert, tropics, arctic, alpine, urban) interact with and adapt to their environments and how are these relationships changing in response to globalization, climate change and other social, historical and political-economic drivers? Cultures situated in landscapes are the basis for an incredible global diversity of worldviews and behaviors that in turn affect how humans experience and "use" their environments. This course will provide an introduction to current and benchmark literature and methods in environmental and ecological anthropology that address people-environment interactions. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): minimum 45 hours; Credit is allowed for only ASB 375 or SOS 375 or ASB 394 (People: Environment Connections in Anthropology) or ASB 494 (Ecological and Environmental Anthropology) |
| SOS | 385 | Business & Sustainability I | Focuses on sustainability practices at the organizational level. Describes how business and consumer products impact our physical environment and the communities that they interact with, and identifies ways to measure and improve the sustainability of products and the supply chains that deliver them. Students will examine organizational practices with regard to sustainability, evaluate the impact of products and services on the environment, and explore a business case for sustainability. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: Minimum 60 hours; SCM 300 or SOS 110 with C or better. Credit is allowed for only SCM 385 or SOS 385 |
| SOS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: Sustainability or Business Sustainability major; SOS 110 and SOS 111 (or PUP 190) with C or better; OR Non-Sustainability major with 2 of the following courses: SOS 100, SOS 110, SOS 111 (or PUP 190), SOS 300 with C or better |
| SOS | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SOS | 421 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 with C or better. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 424 | Dynamic Modeling in Social and Ecological Systems | Introduces the development and use of dynamic mathematical models to study social and ecological phenomena. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit allowed for only ASM, BIO or SOS 424 |

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| SOS | 429 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): BIO 320 (or SOS 326); Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 433 | Sustainable Water Use | A clustered learning network on the problem of water scarce regions, includes insights from hydrology, engineering, biology, economics and public policy. May be repeated once for credit. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 434 | People and Nature: Ecosystem Services | Explores the drivers of biodiversity change and the consequences they have for human wellbeing, taking both an ecological and an economic perspective. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: MAT 117 or SOS 101; junior standing. Credit is allowed for only BIO 434, SOS 434, or BIO 494 (Ecosys Servcs:People&Nature) |
| SOS | 435 | U.S. Energy: Pathways to Sustainability | Organized around four mores of energy and environmental policy: energy supply, technology for efficiency, environmental sustainability and infrastructure. Also incorporates the wider context of energy and the environment in the society in which we live, taking into account our historic past and future potential life experience with energy availability and use. Through critical examination and analysis of these mores, students apply knowledge to the creation of a comprehensive energy and environmental policy plan that addresses past conditions, present states and future possibilities. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Credit is allowed for only SOS 435 or SOS 494 (Energy and Environmental Policy) or SOS 494 (US Energy: Pathways to Sustainability) or SOS 555 or SOS 594 (Energy & Environmental Policy) |
| SOS | 441 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: AML 253, or SOS 210(or SOS 294 Intro to Math Tools & Modeling). Credit is allowed for only AML 441 or 494 (Math Concepts & Tools in Sustainability) or SOS 441 or 494 (Mathematical Concepts and Tools in Sustainability) |
| SOS | 442 | Sustainability Indicators | Measures of sustainability (or sustainable development), focusing on sustainability indicators and indices (SIs). Discusses key conceptual and methodological issues on gauging sustainability and examines a wide range of sustainability indicators and indices that have been commonly used at global, regional and local scales. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only SOS 442, 494 (Sustainability Indicators and Indices), 542 or 598 (Sustainability Indicators and Indices) |
| SOS | 447 | Gender, Culture, and Development | In-depth analysis of gender roles related to health, family, work, education and politics in developing countries. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): WST 100 or 300 or minimum 45 hours; Credit is allowed for only SGS 454 or SOS 447 or TCL 447 or WST 447 or TCL 598 (Gender, Culture & Development) |
| SOS | 456 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | (L or SB) & G | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 36 hours. Credit is allowed for only JUS 456, SOS 456, JUS 394 (Human Rights & Sustainability), or JUS 497 (Seminar in Human Rights) |
| SOS | 463 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | SB & G | Prerequisite(s): minimum 45 hours; Credit is allowed for only ASB 463 or SOS 463 or TCL 443 |

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| SOS | 465 | Sustainable Urbanism | History, theory, principles and practice of New Urbanism, including current critiques and counter-critiques of both movements. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s) with C or better: Sustainability major in a sustainability concentration: SOS 110, 111 (or PUP 190); minimum 45 hours. All other majors: PUP 301. Credit is allowed for only PUP 465 or PUP 565 or SOS 465 |
| SOS | 474 | Collaborative Design Development I | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 464 or IND 464 or MGT 464 or SOS 474 |
| SOS | 475 | Collaborative Design Development II | Team-based product development course featuring applied projects. Open to senior students from business, engineering, design, and other disciplines. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 5 | L | Prerequisite(s): minimum 45 hours; Credit is allowed for only GRA 465 or IND 465 or MGT 465 or SOS 475 |
| SOS | 480 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Challenges students to explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre/Co-requisite: SOS 110, 111, PUP 190 with C or better if completed; Credit is allowed for only SOS 480 or 494 (Achieving Career Success in Sustainability) |
| SOS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 485 | Business and Sustainability II | Exposes students to a variety of ideas, concepts, theories, and models concerning sustainable technologies. Students learn to apply a systematic research process in order to assess a technology with potentially positive sustainability attributes; perform hotspot analysis on a technology in order to understand key environmental and social issues; forecast the future of a sustainable technology through application of technology forecasting models; predict how sustainable technologies are likely to get successfully adopted and diffused. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre-requisites: SCM 385 or SOS 385 with C or better. Credit is allowed for only SCM 485, SCM 494 (Business and Sustainability II) or SOS 485 |
| SOS | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Barrett Honors student |
| SOS | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | School of Sustainability | School of Sustainability | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SOS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Pre-requisites: SOS 110, and SOS 111 (or PUP 190), with C or better |
| SOS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | School of Sustainability | School of Sustainability | 1-7 | | Pre-requisites: Sustainability major; Minimum 9 hours of SOS 320, 321, 322, 323, 324, 325, 326, 327, 328 (or SOS 394 ST: Sustainability and Enterprise), 465 (or PUP 465) |
| SOS | 499 | Individualized Instruction | | Y | SEM | Y | Z1 | School of Sustainability | School of Sustainability | 1-3 | | |
| SOS | 501 | Foundations of Sustainability | Provides a knowledge base to help students to succeed in the online MSL program. Supports MSL students in the four learning threads of the program, which include communications and sustainability, global context, strategic sustainability and sustainability leadership. | N | LEC | N | YGB | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): Sustainability Leadership MSL student; Corequisite(s): EMS 502; EMS 503 |
| SOS | 502 | Tools and Techniques for Sustainability | Forthcoming federal legislation and Executive Orders will set new standards for operational efficiencies, energy and water conservation, use of renewable energy sources, and waste minimization in the Army and Army National Guard. Tools and Techniques for Sustainability presents a systems approach to meet those standards by integrating principles of sustainability into existing Army policies, procedures, and reporting systems. The course features the Framework for Sustainable Strategic Development as an organizing framework to analyze systems and develop strategic plans to move toward sustainability. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Global Sustainability Leadership certificate student; Pre- or co-requisite: SOS 501 |
| SOS | 503 | Operationalizing Sustainability | Sustainability is a means to addressing the significant physical, statutory, and regulatory requirements that affect and can encumber the Army's ability to train Soldiers at ranges and maneuver areas across the United States. With hundreds of imperiled species proposed for federal protection in the next few years, threatened and endangered species and sensitive habitat will continue to be a concern. Participants in Operationalizing Sustainability will explore how innovative training practices, improved land and natural resource management practices, and enhanced community relationships can ensure continued access to the land and water assets needed to maintain readiness and can help to 'win hearts and minds.' Proactive approaches to promoting well-being for soldiers, families, civilians, neighbors, and communities, both at installations and downrange, are stressed. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |

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| SOS | 504 | Energy and the Built Environment | Provides practical approaches to applying sustainability principles and practices to public works activities, housing, facilities operations and management, military construction, master planning, and energy management. Presents approaches to implement high-performance sustainable building design, construction, operation and management, maintenance, and deconstruction. Also covers cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 505 | Sustainable Military Acquisition and Logistics | Sustainable Military Acquisition and Logistics provides practical approaches to applying sustainability principles and practices to all areas of procurement, acquisition, and logistics. Through weapon systems acquisition or procurement of installation goods and services, the Army hopes to drive innovation and promote sustainability while reducing costs. The inclusions of energy and resource efficiency and other sustainability criteria in acquisition and procurement decisions can reduce long-term operation and maintenance costs, conserve resources, and continue to expand innovation throughout the supply chain. This course introduces the application of sustainability principles to procurement and acquisition, transportation, and materiel. The use of life cycle analysis and multicriteria assessment for all 10 classes of supply is also featured significantly in the course. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Sustainability Leadership certificate student; SOS 501; SOS 502 |
| SOS | 510 | Perspectives on Sustainability | University-wide course covering basic perspectives on sustainability. Uses case studies; faculty and students from engineering, architecture, social sciences, and natural sciences exchange ideas on the major challenges faced in forming a sustainable future at the local, national, and global levels. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 511 | Transformational Sustainability Research | Enables students to describe, position, compare, and evaluate the key features, strengths, and weaknesses of sustainability research and problem-solving methods. Introduces an integrated methodological framework for sustainability research and problem solving that maps and structures families of methods from description/analysis to strategy building. Addresses all major families of sustainability methods, critically evaluating their specific function, structure, underlying assumptions, validity, reliability, strengths and weaknesses against this overall framework. The method families include not only scientific methods but also practical problem-solving techniques. Integrates two training programs, one on teamwork skills, the other on participatory collaboration with stakeholders. | N | LEC | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 512 | Sustainable Resource Allocation | Microeconomic principles of resource allocation applied to environmental goods and services, external environmental effects and environmental public goods; decision making under uncertainty, adaptation to and mitigation of environmental change. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 513 | Science for Sustainability | Carbon cycle, nutrient cycles, carbon and nutrients in the oceans, climate change, oxygen and ozone, solid waste pollution, urban air pollution. | N | SEM | Y | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 514 | Human Dimensions of Sustainability | Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social data collection methodologies. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only GCU or SOS 514 |
| SOS | 515 | Industrial Ecology and Design for Sustainability | The conceptual, ethical, and practical challenges in the design, manufacture, and life cycle performance of products; environmental evaluation via materials flow analysis and life cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 516 | Science, Technology and Public Affairs | Explores the political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 515 or GLG 547 or HSD 515 or PAF 547 or SOS 516 |
| SOS | 517 | Sustainability and Enterprise | Examines the evolving interface between sustainability and human enterprise. Explores and reviews key fundamental concepts in the sustainability arena, including economic and scientific drivers and select historical and structural aspects that create the current context for the enterprise and sustainability interface found today. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student. Credit is allowed for only SOS 517 or SOS 591 (Sustainability and Enterprise) |

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| SOS | 518 | Uncertainty and Decision Making | Knowledge is always incomplete, yet decisions must be made. Explores uncertainty and its relation to decision making, with a particular focus on the ways that science and science-derived information is applied with the intent of improving decisions. Explores the many meanings and origins of uncertainty, using theoretical and case-based approaches. A central theme is the relation among uncertainty, scientific prediction, and decision making, especially in politically charged issues, for example as related to management of the environment. Ultimately understands how effective decisions can be made in the face of inevitable uncertainties and contested knowledge. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 517 or BIO 517 or BIO 591 (Uncertainty & Decision Making) or HSD 517 or POS 527 or SOS 518 |
| SOS | 520 | Research Design and Methods for Sustainability | Provides skills and knowledge that help students design their own research and place it in the context of other disciplines or bodies of work. Not a "methods" class because no specific method is taught in depth. Instead, it is an initial introduction to the research design process and is intended as a platform through which students develop the skills to appreciate and contextualize the approaches taken (and methods used) by others, and during which they can identify the types of specific training they require as they define their own research. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Pre- or corequisite(s): SOS 510; Credit is allowed for only SOS 520 or SOS 598 (Intro Design/Mthds) |
| SOS | 521 | Landscape Ecology | Discusses how landscape heterogeneity interacts with ecological processes, and implications for biodiversity conservation, resource management, and landscape and urban planning. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only BIO 421 or BIO 521 or SOS 421 or SOS 521 |
| SOS | 525 | Social-Ecological-Technical Systems (SETS): Domains and interfaces | Guide students in developing an integrated approach and framework for thinking about complex systems in a sustainability context. Presents overviews of content, theories and methods from each of the SETS domains (Social, Ecological and Technical Systems); primarily focuses on how to bring these domains together. Explores the SETS interfaces (intersections) from an integrated perspective and equips students to make those linkages in their research and in subsequent elective courses. Each semester students use a sustainability problem or theme to explore the concepts presented in the course. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 527 | Environmental Ethics and Policy Goals | Advanced seminar in applied environmental ethics, focusing on the most influential and policy-relevant approaches in the field of environmental ethics. Core topics include the historical and philosophical foundations of alternative understandings of environmental responsibility; the debate over utility and preservation in environmental policy argument; and the interplay of ethical principles, scientific knowledge and societal priorities in environmental decision making. Consideration of the ethical and value dimensions of biodiversity conservation, wilderness protection, environmental valuation, environmental activism, climate change and sustainability, among other challenges. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only BIO 527 or SOS 527 or BIO 591 (Environ Ethics & Policy Goals) |
| SOS | 528 | Human Impacts on Ecosystem Functioning | Explores our current understanding of how humans are impacting the functioning of ecosystems and how changes in ecosystems would affect provisioning of ecosystem services and ultimately human well-being. The two primary drivers of ecosystem change are growth of the human population and increased consumption per capita. These drivers affect the Earth's cycles of carbon, nitrogen and water, as well as regional and global-scale changes in biodiversity and climate. Includes an in-depth discussion of scenarios for the next 50 and 100 years, which articulate costs and benefits of alternative development pathways in terms of climate change, food production, clean water and biodiversity. Scenarios of change in biodiversity lead to the topic of the consequences of biodiversity change for the functioning of ecosystems from the point of view of their productivity and stability. Human activities have disrupted several biogeochemical cycles including nitrogen and carbon cycles. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only BIO 429, BIO 528, SOS 429, SOS 528, or SOS 494/598 (Human Impacts on Ecosystem Functioning), or BIO 494/598 (Human Impacts on Ecosystem Functioning) |
| SOS | 530 | International Development and Sustainability | Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional and global scale. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SOS | 531 | Achieving Career Success in Sustainability | The need for sustainability-minded workers and leaders has never been more important than right now. Yet sustainability as a career track is still very new and means different things to different people. Students explore their own ambitions and "personal brands," to shape their work personas, to model the behaviors and competencies that build long-term career success, and to uncover the sustainability potential of any job, whether or not "sustainability" is in the job title. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): SOS 510; Credit is allowed for only SOS 531 or SOS 598 (Achieving Career Success in Sustainability) |
| SOS | 532 | Sustainable Urban Dynamics | Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of the institution and regulatory framework on the ability of social and urban-ecological systems to be resilient and sustainable; urban design, materials, transport, planning, and regulation. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): (degree- or nondegree-seeking graduate student; Credit is allowed for only ASB 533 or SOS 532 |
| SOS | 533 | Sustainable Water | Hydrological, legal, political, and ecological implications of alternative water management strategies; effect of institutional and regulatory frameworks; changes in water demand and supply due to human (population growth, economic changes) and natural (drought, climate change) factors | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 534 | Sustainable Energy and Material Use | Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation: current and future urban energy systems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 535 | Sustainable Ecosystems | How human activities and management practices alter biodiversity, ecosystem functioning and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the sustainable flow of services from ecosystems. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ELS 535 or SOS 535 |
| SOS | 536 | Food System Sustainability | Broad view of food systems and the sustainability of such systems. Concepts, theory, methods and empirical analyses from diverse disciplines, including agro-ecology, agronomy, political science, agricultural economics, geography, anthropology, and food and nutrition studies. Students choose a theme that is a core concern to food system sustainability and pursue that theme in diverse course activities and through engaging in the broader food system we are embedded in as residents in the Phoenix area. Culminates with a term paper/project that synthesizes experience and knowledge, providing a unique perspective on their role in food systems. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 540 | Statistical Modeling for Sustainability | Equips students with sufficient knowledge of statistical theory and methods of applied data analysis to begin conducting empirical analyses in their domains of interest; bring students to a high level of competency in using a cutting-edge statistical software package (Stata) for data management and data analysis tasks; expose students to applications of statistical methods in the economics/policy/social science sustainability literatures in order to develop an understanding for how statistical tools are operationalized in the research world; and develop an appreciation for the careful synthesis of social and natural science theory, knowledge of data and its limitations and command of statistical tools that constitute quality empirical research. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 4 | | Prerequisite(s): degree- or non-degree-seeking graduate student; Credit allowed for only AML, ESS or SOS 540 |
| SOS | 541 | Mathematical Concepts and Tools in Sustainability | Explores various mathematical analysis and models pertinent to sustainability science drawn from both social and natural sciences and introduced in a problem-based context. Demonstrates basic concepts from game theory such as pure-strategy and mixed-strategy Nash equilibriums in such classic games as prisoner's dilemma, hawk-dove, coordination. Explores the evolutionary dynamics of these games through the replicator equations. Studies important concepts of stability and regime shift for selected problems. Also discusses some basic solution concepts in cooperative game theory (depending on interest and time). | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit allowed for only AML 494 (Math Concepts & Tools in Sustainability), AML 541, SOS 494 (Math Concepts & Tools in Sustainability), SOS 541 or SOS 598 (Math Concepts & Tools in Sustainability) |
| SOS | 542 | Sustainability Indicators | Measures of sustainability (or sustainable development), focusing on sustainability indicators and indices (SIs). Discusses key conceptual and methodological issues on gauging sustainability and examines a wide range of sustainability indicators and indices that have been commonly used at global, regional and local scales. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only SOS 442, 494 (Sustainability Indicators and Indices), 542 or 598 (Sustainability Indicators and Indices) |

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| SOS | 545 | Organizations, Sustainability & Public Policy | Sustainability concerns are fast becoming a strategic issue for organizations in all sectors. In the last ten years, numerous organizations have completely redefined their business strategies in line with principles of sustainability by balancing the requirements for economic development, environmental quality and social justice, and governments worldwide are developing programs and policies that encourage these activities. Explores the connections between organization strategy—especially within the private sector, sustainability and public policy. Through a combination of practical cases, readings and lectures, class sessions engage students in discussions aimed at developing sustainability assessment models. Additionally, students apply new strategy tools that incorporate principles of proactive environmental management and social responsibility designed to enhance the public good. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate; Credit is allowed for only PAF or SOS 545 |
| SOS | 546 | Life Cycle Assessment for Civil Systems | Covers fundamental and advanced concepts of the life cycle assessment framework exploring products, services, activities and infrastructure systems. Examines key concepts for system boundary selection, functional unit selection, inventorying, impact assessment and interpretation stages with a focus on energy and environmental assessment. Advanced concepts include allocation of effects, problem formulation for assessing footprints versus decisions or policies, and assessment of infrastructure interdependencies and supply chains. Exposes tools and data sources and presents approaches for evaluation of sensitivity and uncertainty of results. Encourages students with broad sustainability interests to enroll and explore how life cycle assessment can aid their work by shifting their views from direct to cradle-to-grave effects. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only CEE 506 or CEE 598 (Lifecycle Assessment) or SOS 546 or SOS 598 (Lifecycle Assessment) |
| SOS | 547 | Urban Infrastructure Anatomy and Sustainable Development | Understanding how built environment infrastructure systems interact with ecosystem services is critical for policies and decisions directing urban sustainability. Brings together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students are given background on how infrastructure systems work and are interdependent, and explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only CEE 507 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or PUP553 or 598(Urban Infrastruct Anatomy/Sustainable Dev) or SOS547 or SOS598 (Urban Infrastr Anatomy & Sustain Dev) |
| SOS | 552 | Advanced Earth Systems Engineering and Management | Advanced introduction to earth systems engineering and management, and the technological, economic and cultural systems underlying the terraformed Earth. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Credit is allowed for only CEE 581 or SOS 552 |
| SOS | 553 | Ecological Anthropology | Focuses on the theories and methods that environmental anthropology (EA) can bring to bear on human-environmental questions across a variety of social-ecological systems. Explores how environmental anthropologists approach these complex challenges, and considers the role of EA within larger interdisciplinary approaches for understanding development, adaptation, vulnerability, and change. | N | LEC | N | OPT | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only ASB 530 or SOS 553 |
| SOS | 555 | US Energy: Pathways to Sustainability | Organized around four mores of energy and environmental policy: energy supply, technology for efficiency, environmental sustainability and infrastructure. Also incorporates the wider context of energy and the environment in the society in which we live, taking into account our historic past and future potential life experience with energy availability and use. Through critical examination and analysis of these mores, students apply knowledge to the creation of a comprehensive energy and environmental policy plan that addresses past conditions, present states and future possibilities. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit for only SOS 435,SOS 494 (Energy & Environ Policy) or SOS 494- US Energy: Pathways-to Sustain or SOS 555 or 594 (US Energy: Pathways to Sustainability) or SOS 594 (Energy & Environmntl Policy) |
| SOS | 570 | Fundamentals of CAS Science | Many phenomena of critical relevance to human society are dynamic systems that change over individual and evolutionary time scales, and are highly interactive, both within and between systems. That is, they are complex adaptive systems (CAS), and thus share isomorphic properties like near-decomposability, hierarchical organization, scale-free networks, self-organized criticality, and emergence. Fundamentals of CAS science explores the diverse, interdisciplinary applications of a complex adaptive systems across the social, behavioral, and life sciences. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only ASM, BIO, or SOS 570 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SOS | 577 | Interdisciplinary Writing Seminar | If you want your work to make a difference in the world, you need to be able to communicate your ideas to diverse audiences in a way that is interesting and accessible. Teaches students to write clearly, persuasively, and ethically to people in your discipline, in other disciplines, and outside academia. Approaches writing as a way to think critically and refine ideas, as well as to communicate them to others. | N | SEM | Y | GNA | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is only allowed for ESS 577 or SOS 577 or SOS 598 (Interdisciplinary Writing) or SOS 598 (Writing Seminar) |
| SOS | 578 | Writing Papers for Publication | Students produce a draft of a research paper for submission to a peer-reviewed journal. Analysis of exemplary published papers and narrative strategies, along with peer review, support the writing process. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 2 | | Prerequisite(s): SOS 577 or SOS 598 (Interdisciplinary Writing Seminar). Credit is allowed for only SOS 578 or SOS 598 (Writing Papers for Publication) |
| SOS | 579 | Proposal Writing | Proposal writing and reviewing with a focus on the NSF dissertation improvement grant format. Discusses professional development. | N | SEM | N | OPT | School of Sustainability | School of Sustainability | 3 | | |
| SOS | 581 | Synthesis for Sustainability Research | Engages students in inter- and transdisciplinary problem solving after they have gained depth of training in content areas, integrative approaches and methods. Students link their own research to the broader field of sustainability. Research. | N | RSC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): SOS 510; 520; 525; 579; Co-requisite(s): SOS 596 or SOS 599 |
| SOS | 582 | Project Management for Sustainability | Provides exposure to the tasks and challenges facing project managers, i.e., those people responsible for the vital function of managing complex projects in sustainability in today's environment. Successful project managers have the abilities and skills to simultaneously manage people, schedules, risks, and resources while delivering successful outcomes. This course is a prerequisite for the MSUS culminating experience. | N | LEC | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): Graduate Sustainability major; SOS 510. Pre- or corequisite: SOS 511 |
| SOS | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 589 | Community of Graduate Student Scholars | Provides the opportunity to develop new skills, to foster cohort building, to interact with other students and faculty, and to network and build support with the alumni network. Overseen by a faculty member but is primarily directed by the students. All MA or MS students take this course each semester. Although there is an overall structure as demonstrated in the course schedule, the specific content of the course varies each semester depending on the needs and interests of the students. | N | LEC | Y | YGB | School of Sustainability | School of Sustainability | 1 | | Prerequisite(s): School of Sustainability graduate students |
| SOS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | STO | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 596 | Scientific Paper | MA/MS students are required to devote six hours to conducting research and writing a scientific paper of publishable quality based on the research. The paper topic, the research methodology, and the written format must be approved by the supervisory committee. Students must decide if they will complete the paper on their own or as a group. | N | RSC | Y | YGB | School of Sustainability | School of Sustainability | 1-6 | | Prerequisite(s): Sustainability MA or MS student; SOS 510; SOS 579 |
| SOS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-12 | | |

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| SOS | 656 | Human Rights and Sustainability | Addresses the connections between human rights and environmental sustainability. Legal and scholarly approaches linking these areas present new perspectives for addressing some of the greatest challenges of our time, given the important resource dimensions of economic and social rights and the human dimensions of sustainability. Yet human rights demands and environmental concerns are not always in harmony. Explores these tensions and opportunities by examining three substantive areas: urban ecology and human rights, the human right to food, and the human rights implications of extractive industries such as oil and mining. Following an introduction to the key concepts of human rights and sustainability, explores the substantive areas through theoretical and empirical readings on each; grassroots accounts of struggles over environment-related human rights; and selections from literature and film that illustrate the environmental justice issues at stake. | N | SEM | N | GNA | School of Sustainability | School of Sustainability | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only JUS 656 or SOS 656 or JUS 691 (Human Rights & Sustainability) |
| SOS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | |
| SOS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | School of Sustainability | School of Sustainability | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SOS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |
| SOS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | School of Sustainability | School of Sustainability | 1 | | |
| SOS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | School of Sustainability | School of Sustainability | 1-15 | | |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 101 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 102, 111, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325 or 412 may not enroll in SPA 101 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 102 | Elementary Spanish | Fundamentals of the language. Emphasizes listening, speaking, reading, and writing. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | | Students with credit for SPA 111 or higher may not enroll in SPA 102 |
| SPA | 110 | Intensive Spanish I | First-semester intensive course for students who (1) have never taken Spanish language courses before, or (2) have studied Spanish for one year at the high school level, or (3) have authorization from the Spanish section. This six-hour course meets on Mondays, Tuesdays, Wednesdays and Thursdays for 75 minutes in the classroom. To achieve the maximum level of proficiency, the course focuses on the development of speaking and written skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | |
| SPA | 111 | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 111 | Fundamentals of Spanish | Primarily for students with two years of high school Spanish who need review to enter second-year study. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | | Students may not enroll in SPA 111 if credit earned in SPA101, 102, 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |

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| SPA | 118 | Basic Spanish for Health Care Professionals | Introductory Spanish course that focuses on helping students develop basic oral Spanish skills that allows them to interact with patients in the health care settings. Health care-related vocabulary, simple medical scenarios and basic grammar form the majority of the course curriculum. Students are responsible for completing virtual oral dialogues with a partner each week. | N | LEL | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Students may not enroll in SPA 118 if credit earned in SPA 194 (Basic Spanish for Health Care Professionals), SPA 201, 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Pre-requisite: Maximum 25 hours |
| SPA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 201 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | Students may not enroll in SPA 201 if credit received in SPA 202, 203, 204, 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 202 | Intermediate Spanish | Continuation of fundamentals. Emphasizes the development of the skills of reading, listening comprehension, speaking, writing, and culture. | N | LEL | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 4 | G | May not enroll in SPA 202 if received credit in SPA 204, 311-316, 325 or 412 |
| SPA | 203 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 201. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | Students may not enroll in SPA 203 if they have received credit in SPA201, 202, 204, 311, 312,313,314,315,316,325,412 |
| SPA | 204 | Intermediate Spanish for Bilinguals | For Spanish-speaking students, in lieu of SPA 202. Composition, literature, conversation, grammar fundamentals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 4 | G | May not enroll in SPA 204 if credit received in SPA 202, 311,312,313,314,315,316,325, or 412 |
| SPA | 210 | Intensive Spanish II | Second-semester intensive course for students who have authorization from the Spanish section. This six-hour course that meets on Mondays, Tuesdays, Wednesdays and Thursdays for 75 minutes in the classroom. To achieve the maximum level of proficiency, the course is focused on the development of speaking and written skills. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 6-8 | | Prerequisite(s): SPA 110 with C or better |
| SPA | 218 | Intermediate Spanish for Health Care Providers | Intermediate Spanish course that focuses on helping students develop oral Spanish skills that allow them to interact with patients in the health care settings. Health care-related vocabulary, the impact of culture on health care, medical scenarios and intermediate grammar form the majority of the course curriculum. Students are responsible for completing virtual oral dialogues with a partner each week. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Students may not enroll in SPA 218 if credit earned in SPA 294 (Intermediate Spanish for Health Care Providers), SPA 311, 312, 313, 314, 315, 316, 325, or 412 |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 313 | Spanish Conversation and Composition | Designed to develop skill and accuracy in spoken and written Spanish. Required of majors; SPA 313 and 314 must be taken in sequence. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 202 with C or better; May not enroll in SPA 313 if credit received in SPA 314, 315, 316, 325 or 412 |
| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 314 | Spanish Conversation and Composition | See SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Prerequisite(s): SPA 313 or 315 with C or better; Students may not enroll in SPA 314 if they have received a C or better in SPA 412 |
| SPA | 315 | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | 315 | Spanish Conversation and Composition for Bilinguals | Emphasizes comparing standard Spanish with regional Southwest Spanish. May be taken in lieu of SPA 313. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | May not enroll in SPA 315 if credit received in SPA 313, 314, 316, or 412 |
| SPA | 316 | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | 316 | Spanish Conversation and Composition for Bilinguals | See SPA 315. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisite: SPA 315; Students who have credit for SPA 314 or SPA 412 may not enroll in SPA 316 |
| SPA | 317 | Spanish for the Professions | Advanced-level course that serves as an introduction to the Spanish for the Professions minor or certificate. Develops oral and written skills that prepares students to use their Spanish in their careers and/or professional fields of interest. Also covers several cultural points that facilitate effective interaction with Spanish speakers in the professional world and global community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: SPA 314 or 316 |
| SPA | 318 | Advanced Spanish for Health Care Professionals | Advanced Spanish course that focuses on helping students develop oral Spanish skills that allow them to interact with patients in the health care settings. Health care-related vocabulary, the impact of culture on health care, medical scenarios and advanced grammatical structures form the majority of the course curriculum. Students are responsible for completing virtual oral dialogues with a partner each week. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Students may not enroll in SPA 318 if credit earned in SPA 394 (Advanced Spanish for Health Care Professionals) or SPA 412 |
| SPA | 319 | Business Correspondence and Communication | Organization and presentation of clear, effective business communications; vocabulary applicable to modern business usage. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisite: SPA 314 or 316 |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 325 | Introduction to Hispanic Literature | Critical approach to and analysis of literary types, including poetry, drama, short story, and novel. Required of all majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Pre-requisites: SPA 313, 314, 315, 316, 412 or 413 with C or better |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 400 | Introduction to Spanish Linguistics | Introduces the discipline and methods of linguistics through the study of Spanish data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre/co-requisite: SPA 412 or 413; Students who have credit for SPA 400 may not enroll in SPA 539 |
| SPA | 401 | Spanish Oral Communication for the Professions | Students practice their Spanish oral communication skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students gain practice in speaking varieties of Spanish that would assist their communication with monolingual Spanish-speaking Latino clients in formal (professional) and informal contexts in the public sector. Students gain experience in giving public talks, reporting on cultural events and issues in the Hispanic community, participating in simulated workplace exercises requiring the ability to carry out various language functions appropriately in different contexts. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Oral Comm. for Profes) may not enroll in SPA 401 |
| SPA | 402 | Written Communication for the Professions | Students hone their Spanish literacy (reading and writing) skills in the context of serving U.S. Latino clients in the community (e.g., schools, government agencies, social work settings, medical settings) or reporting on issues of interest to the Hispanic community. Students read and understand documents in Spanish that they would come across in the process of assisting monolingual Spanish-speakers in the public sector or doing research on the Hispanic community (e.g., birth certificates, academic transcripts, medical reports, criminology documents, newspaper or magazine articles). Students gain practice in creating written documents in Spanish that would assist their communication with Latino clients in formal (professional) and informal contexts or that would allow them to report intelligently on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish Written Communication) may not enroll in SPA 402 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 403 | Spanish Grammar and Stylistics for the Professions | Students raise their level of awareness of appropriate grammatical, lexical and stylistic forms to use in their oral and written communication with U.S. Latino clients in formal (professional) and informal contexts in the community (e.g., schools, government agencies, social work settings, medical settings) or for reporting on issues of interest to the Hispanic community. Students enhance their analytical skills by analyzing and comparing Spanish oral and written discourse for genre-appropriate features (stylistics), grammaticality, mechanics, coherence and for a logical flow of ideas in public documents and oral discourses meant for a U.S. Latino audience. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Span Gram & Stylistics for Pro) may not enroll in SPA 403 |
| SPA | 404 | Spanish in U. S. Professional Communities | Students investigate linguistic issues that impact the U.S. Latino community's interaction with professionals (e.g., interaction with service providers in schools, government agencies, social work settings, medical settings; language planning at state and local levels; Spanish spoken in different regions in the U.S.); Spanish language assessment of public sector employees; creation of Spanish for Professional Purposes courses). Students also learn to report on issues of interest to the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Spanish in the Community) may not enroll in SPA 404 |
| SPA | 405 | Latino Cultural Perspectives for the Professions | Requires students to investigate the Latino cultural perspectives that underlie and affect communication in the professional world. Students come to understand the historical context that has affected the lives of Latino community in the U.S. and take a critical look at values traditionally associated with Latino culture (e.g., the importance of family ties, fatalism, honor, respecting elders, machismo or marianismo), which provide background information for professionals in the public sector who need to serve the needs of the Hispanic community. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisite: SPA 314 or 316; Students who have credit for SPA 494 (Latino/a Cultural Perspect Pro) may not enroll in SPA 405 |
| SPA | 406 | Introduction to Spanish/English Medical Interpretation | Provides an introduction to interpretation theory and practice with a specific focus on interpretation for medical fields. Constitutes an academic introduction to the field and does not certify students to be medical interpreters. Students who enroll in this course should have an advanced level of conversational Spanish. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): SPA 314, SPA 316, or SPA 394 (Introduction to Spanish for the Professions); Credit is allowed for only SPA 406 or SPA 494 (Interpretation for Medical/Law Enforcement Personnel) or SPA 494 (Intro to Spanish/English Medical & Legal Interp) |
| SPA | 412 | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | 412 | Advanced Conversation and Composition | Oral and written Spanish communication skills, with particular attention given to developing fluency and facility. Required of majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 413 with C or better |
| SPA | 413 | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |
| SPA | 413 | Advanced Spanish Grammar | Intensive analysis of the Spanish language. Required of teaching majors. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | G | Pre-requisites: SPA 314, 316 or 412 with C or better |
| SPA | 414 | Spanish for Sustainability and Environmental Studies | Provides language skills to engage in meaningful communication and official transactions in sustainability and environmental studies with an intermediate to high level of Spanish speaking, reading and writing competence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 314 or SPA 316 with C or better; Credit is allowed for only SPA 394 (Spanish for Sustainability) or SPA 414 |
| SPA | 417 | Spanish Phonetics and Phonology | Introduces the theory and practice of Spanish phonetics and phonology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 or 413 with C or better |
| SPA | 418 | Spanish Syntax | Introduces the syntax of the Spanish language by analyzing different word categories, their groupings in phrases, and the structure of both simple and complex sentences. Advanced course that requires some previous knowledge of basic structures of the language and their internal structure. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 412 or SPA 413 with C or better |
| SPA | 419 | Language Variations of Spanish | Spanish dialectology and variationist/quantitative sociolinguistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre- or corequisite(s): SPA 417 and 418 with C or better if completed; Credit is allowed for only SPA 419 or SPA 494 (Language Variations of Spanish) |
| SPA | 420 | Applied Spanish Linguistics | Applies linguistic principles to the teaching of Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L | Pre-requisites: SLC 201 or SPA 400 with C or better; SPA 413 |
| SPA | 421 | Spanish in the Southwest | Discussion and linguistic analysis of Southwest Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or SB) & C | Pre-requisites: SPA 412 with C or better |
| SPA | 422 | Spanish Lexicology and Lexicography | Explores the linguistic theory and methodology related to the defining of meanings of words in Spanish dictionaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 412 |
| SPA | 425 | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): SPA 325 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 425 | Spanish Literature | Surveys Spanish literature from its beginning to 1700. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): SPA 325 |
| SPA | 426 | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU | Prerequisite(s): SPA 325 |
| SPA | 426 | Spanish Literature | Surveys Spanish literature from 1700 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): SPA 325 |
| SPA | 427 | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): SPA 325 |
| SPA | 427 | Spanish American Literature | Surveys major works, figures, and movements from Colonial period to 1880. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | L or HU | Prerequisite(s): SPA 325 |
| SPA | 428 | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 428 | Spanish American Literature | Surveys major works, figures, and movements from 1880 to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 429 | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 429 | Mexican Literature | Selected readings from pre-Columbian writers/poets (e.g., Macuilxochitl) through the novel of the Revolution to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 431 | Prose of Golden Age | Focuses on a number of books of canonical prose of 16th- and 17th-century Spain. Spanish Golden Age prose is considered one of the most important bodies of literature both in the Spanish-speaking world and in early modern studies. An astonishing number of works of fiction and nonfiction were written in the period, inspiring artists and intellectuals all over Europe. All readings are representative of genres that, in addition to enjoying popularity in Spain, were extensively translated into other languages throughout Europe. Through a wide readership, <i>Carcel de Amor</i> , <i>el Lazarillo</i> , <i>La Celestina</i> , <i>El Abencerraje</i> , the <i>Novelas ejemplares</i> , and <i>Desenganos amorosos</i> , influenced the system of literary genres. They established a model for successful genres such as the sentimental novel, the picaresque and the Moorish novel, and promoted the reacceptance of the Italian novella in Spain. | N | LEC | N | OP6 | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L or HU | Prerequisite(s): SPA 325 |
| SPA | 434 | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 325 |
| SPA | 434 | Drama of the Golden Age | Dramatic works of Lope de Vega, Calderon de la Barca, and their contemporaries. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): SPA 325 |
| SPA | 435 | Cervantes-Don Quijote | Don Quijote and the development of the novel. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & H | Prerequisite(s): SPA 325 |
| SPA | 454 | 19th-Century Spanish American Narrative | Principal works in the novel, short story, narrative fiction, and narrative (Gauchesque) poetry. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 325 |
| SPA | 456 | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 325 |
| SPA | 456 | 20th-Century Spanish American Fiction | Major works and movements. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): SPA 325 |
| SPA | 464 | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & C | Prerequisite(s): SPA 325 |
| SPA | 464 | Mexican American Literature | Representative literature in Spanish and English by Mexican Americans, emphasizing sociocultural as well as literary values. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C | Prerequisite(s): SPA 325 |
| SPA | 471 | Civilization of the Spanish Southwest | Political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & C | Pre-requisites: SPA 314 or 316 |
| SPA | 472 | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | 472 | Spanish American Civilization | Growth of the institutions and cultures of Spanish American people. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H & G | Pre-requisites: SPA 314 or 316 |
| SPA | 473 | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |

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| SPA | 473 | Spanish Civilization | Political, intellectual, social, economic, and artistic development of the Spanish nation from its origin to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & G | Pre-requisites: SPA 314 or 316 |
| SPA | 474 | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 474 | Mexican Culture | Examines diverse aspects of Mexican culture since the 1910 Revolution. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or HU) & G | Prerequisite(s): SPA 325 |
| SPA | 481 | Dictatorships and Dirty Wars: Latin American Cinema from Resistance to Reconciliation | Examines aspects of Latin American politics and culture of and through the optic of social unrest. Examines films focusing on the period(s) of recent Latin American history in which there have been social upheavals, dictatorships and state repression, "dirty wars": understood as clandestine wars waged on the citizenry by the government, social movements from below. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s) with C or better: LAS 205, 206, 330. Credit is allowed for only LAS 481 or SPA 481 or ENG 494 (Dictatorships/Dirty Wars:Lat Am Cinema) or SPA 494 (Dictatorships/Dirty Wars:Lat Am Cinema) |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 485 | Mexican American Short Story | Critical study of contemporary short stories by Mexican American authors, with emphasis on their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | L & C | Prerequisite(s): SPA 325 |
| SPA | 486 | Mexican American Novel | Social and literary contexts of representative novelists, emphasizing their Spanish-language writings. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 325 |
| SPA | 487 | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): SPA 325 |
| SPA | 487 | Mexican American Drama | Representative dramatic works, with emphasis on the history and development of this genre from its regional origins to the present. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Prerequisite(s): SPA 325 |
| SPA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPA | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-7 | | |
| SPA | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |

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| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| SPA | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| SPA | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 520 | Preparing for Professional Careers | Professional training of graduate students who pursue an academic job. Guides these students through their career and provides the tools they need to navigate their new and demanding academic life, not only as current students but also as future faculty. Among others topics, covers the following: research, publishing, surfing the Internet and the library for articles and books, bibliographical matters, conferences and presentations, professional ethics, choosing a dissertation director, writing and publishing the dissertation, first job search, differences among institutions, cover letters, CVs, tenure issues, and balance of personal and professional life. Explores all the practicalities of the academic profession to direct students to the right track from the first day of graduate school. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPA | 534 | Spanish Drama of the Golden Age | Analyzes principal works and figures of Golden Age Drama (Cervantes, Lope de Vega, Calderón, Tirso de Molina, Moreto, Ruiz de Alarcón) with current theater theory and comedia performance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 536 | Generation of 1898 | Works of Unamuno, Baroja, Azorín, and their contemporaries, studied against the ideological background of the turn of century in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 537 | Women in Spanish Literature | Major female writers and their texts from Spanish literature (María de Zayas, Ángela Grassi, Concepción Arenal, Emilia Pardo Bazán, Carmen Laforet, Paloma Pedrero) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 538 | Mexican American Women Writers | Major female figures and works in Spanish or translation by contemporary writers (Zamora, Castillo, Corpi, Anzaldúa, L.D. Cervantes, D. Chávez, Duarte, Cisneros) interpreted via current feminist and other critical theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 539 | General Spanish Linguistics | Introductory course to the study of the linguistic structure of the Spanish language and its various sub fields, such as phonetics, phonology, syntax, morphology and the history of the language. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: graduate student; students who have credit for SPA 400, may not enroll in SPA 539 |
| SPA | 540 | History of the Spanish Language | Analyzes and discusses the development of Spanish from Vulgar Latin to the present day. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 541 | Spanish Language in America | Discusses and analyzes various regional and social varieties of Spanish in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 542 | Studies in the Spanish of the Southwest | Examines bilingualism and the social and regional dialects of Spanish in the Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 543 | Structure of Spanish | Analyzes and discusses data on selected topics in Spanish morphology, semantics, and syntax. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 544 | Spanish Phonology | Surveys problems of Spanish phonology within the context of recent phonological theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 545 | Concepts of Literary Criticism | Aims and methods of modern literary scholarship. Discusses major theories of literary analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 547 | Spanish Pragmatics | Studies the theoretical aspects of pragmatics and their incorporation to the analysis of talk in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Pre-requisites: SPA 400 or SPA 539 |
| SPA | 552 | Studies in Mexican American Film | Major figures and films by contemporary filmmakers (Sylvia Morales, Cheech Marin, Gregory Nava, Lourdes Portillo, Roberto Rodríguez, Evelina Fernández) interpreted via critical film theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

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| SPA | 553 | Latin American Feminist Film | Examines Latin American feminist films in the context of contemporary Latin American culture; films viewed analyzed as casework examples. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | Prerequisite(s): Degree- or Nondegree-seeking graduate; Credit is allowed for only SPA 553 or 583 (Feminist Filmmaking) |
| SPA | 555 | Spanish American Modernism | Principal works and figures of literary modernism, 1880-1920, with emphasis on international literary context of the movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 557 | Contemporary Spanish American Poetry | Major works and problems in contemporary poetry and poetics, with emphasis on Paz, Parra, Cardenal, and new poetry since 1960. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 560 | Medieval Spanish Literature | Major figures and works of the Middle Ages in Spain. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 564 | 19th-Century Spanish Prose Fiction | Principal figures and works of realism in the 19th-century novel, with emphasis on Gald&ocute;s. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 565 | 20th-Century Spanish Drama | Principal figures and works of Spanish dramatic literature from the Generation of 1898 to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 566 | Generation of 1927 | Major poets of the Generation of 1927, with emphasis on works of Lorca, Guillen, Salinas, and Aleixandre. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 567 | Contemporary Spanish Novel | Major works of post-Civil War Spanish fiction. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 568 | Cervantes | Extensive analysis of the prose and theater of Cervantes as a key figure of the Spanish Golden Age. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 569 | Studies in Spanish Film | Examines major figures and films in Spanish cinema. Critically interprets films through current film theory, history, and critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 572 | Spanish American Drama | Major contributions of Spanish American drama, with emphasis on contemporary dramatists. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 573 | Spanish American Essay | Major works of the essay, within the framework of intellectual history and literary movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 574 | Spanish American Vanguard Poetry | Examines poetic developments, 1920-1940, with emphasis on Huidobro, Vallejo, Neruda, and the international context of their works. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 575 | Contemporary Spanish American Novel | Principal novels of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 576 | Contemporary Spanish American Short Story | Principal short stories of the <i>Nueva Narrativa Hispanoamericana</i> within the context of contemporary theories of the narrative. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 577 | Regional Spanish American Literature | Figures and works of major national (Peru, Argentina, Chile, and Mexico) and regional (Caribbean) literatures. Topics offered on a rotating basis. May be repeated when topics vary. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 582 | Studies in Latin American Film | Examines the role of film in contemporary Latin American culture; films viewed and analyzed as casebook examples. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 585 | Mexican American Short Story | Major collections and figures in Spanish or translation by contemporary Chicano short story writers (Úlca, Suárez, Ulbarri, Soto, Aguilar, P. Martín, Alarcón, R. Sánchez, N. Cantú, J. Sagel, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 586 | Mexican American Novel | Major novels and figures in Spanish or translation by contemporary Chicano novelists (Hinojosa-S., Méndez, Morales, Cota-Cárdenas, Cisneros) interpreted via current narrative theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 587 | Mexican American Drama | Major works of Mexican American drama, with emphasis on contemporary playwrights (Valdez, Portillo-T., Morton, Moraga, Gómez-Peña) interpreted via current critical drama theory an other methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 588 | Mexican American Essay | Major figures and essays in Spanish or translation by contemporary essayists (Rendón, Anzaldúa, Villanueva, Rodríguez, Mora, Stavans) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPA | 589 | Mexican American Poetry | Major figures and works in Spanish or translation by contemporary poets (Gonzales, Alurista, L.D. Cervantes, B. Zamora, R. Sánchez, Baca, G. Valdés, J. Montoya, G. Velázquez, T. Villanueva, J.F. Herrera, A. Villanueva) interpreted via current critical theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| SPA | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| SPA | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| SPA | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 601 | Latin American Feminist Cultural Production | Latin American feminist theory and studies as viewed through cultural production such as literature, film, photography, art. | N | SEM | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | | |
| SPA | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |

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| SPA | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 791 | Seminar | | Y | LEC | Y | CNV | Liberal Arts and Sciences | School of International Letters and Cultures | 1-12 | | |
| SPA | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPA | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of International Letters and Cultures | 1 | | |
| SPA | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-15 | | |
| SPE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 222 | Orientation to Education of Exceptional Children | Legal aspects of special education; legislation, education and community services to meet the needs of students with special education needs. Examines the nature and characteristics of students with developmental disabilities, autism, communication disorders, emotional or behavioral disorders, learning disabilities, sensory impairments, orthopedic impairments, other health impairments, and children with gifts and talents. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB & C | Credit is allowed for only SPE 222 or SPE 311 |
| SPE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 310 | Professional Practices and Foundations in Special Education | Foundational themes and issues in special education. Discusses each disability within the mild cross-categorical area in relation to foundational themes and issues relating to professional practices in special education. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 316 | Introduction to Physical Disabilities and Other Health Impairments | Introduces various physical disabilities and other health impairments with an emphasis on service delivery in schools and communities. | N | LEC | N | OPT | Institute & Grad Sch Education | Division of Curriculum and Instruction | 3 | | |
| SPE | 317 | Special Education for Culturally and Linguistically Diverse Children and Youth | General issues and practical applications regarding the education of culturally and linguistically diverse students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Admission to Professional Teacher Preparation Program |
| SPE | 320 | Assessment and Evaluation of Children with Special Needs | Norm-referenced, criterion-referenced, and formative evaluation to determine eligibility, plan individualized programs, and monitor progress of students with disabilities. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 321 | Classroom and SPE Assessment | Norm-referenced and criterion-referenced assessment and evaluation of student learning to determine eligibility, plan individualized programs and monitor progress of students with disabilities. Includes academic, language disorders and transition assessments. Emphasizes integration and adaptation of curriculum, instruction and evaluation for all students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| SPE | 322 | Behavior Management and Consultation | Analysis, intervention, and consultation strategies for effective management of classroom and social behavior for students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 323 | Behavioral Strategies for All Students | Focuses on behavior analysis and classroom management intervention and consultation strategies in general education and special education settings. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing |
| SPE | 325 | Language Literacy 1 in Elementary Schools | Theoretical knowledge and pedagogical skills for implementing a high-quality reading program. Course objectives and topics are aligned to standards for reading and research from the International Reading Association (IRA), Arizona College and Career Ready Standards (ACCRS), Interstate Teacher Assessment and Support Consortium (InTASC) standards, and the National Reading Panel Report (2000). Focuses on emergent literacy, phonemic awareness, phonics, fluency, vocabulary and comprehension. Presents strategies and assessments to support students of a variety of ability levels and cultural backgrounds with a specific focus on the struggling readers and English language learners. For education majors only. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program; Credit is allowed for only RDG 322 or SPE 325 |

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| SPE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | Prerequisite(s): minimum 45 hours |
| SPE | 396 | Clinical Experience I | Applies course content while working with students with disabilities in inclusive settings. Emphasizes classroom and behavior management. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 2 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 397 | Field Experience II | Develops knowledge and skills for effective classroom management, establishing a positive classroom environment, and effective lesson delivery. Continues use of the TAP instructional rubric, the college professionalism rubric, and strategies for co-teaching. Provides opportunities for students to engage as a teacher and learner in a pre-K-12 classroom setting. Emphasizes focused observation; co-planning with a placement teacher; and co-teaching lessons to a whole group, small group, and individual student. | N | PRA | Y | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-2 | | Pre-requisite: EED 396 |
| SPE | 410 | Mathematics in Elementary Schools | Methods of teaching mathematics to all students at the K-8 level, instructional planning and assessment. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to the Professional Program; Credit is allowed for only EED 412 or MTE 412 or SPE 410 |
| SPE | 411 | Parent Involvement and Regulatory Issues | Emphasizes parent and school relations through effective communication and state and federal regulations impacting services for the handicapped. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum junior standing OR enrolled in Early Childhood minor |
| SPE | 416 | Quality Practices in the Collaborative Classroom | Develops skills, strategies, and a knowledge base for preservice teachers in building collaborative partnerships with special educators. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 417 | Inclusion Practices at the Secondary Level | Applies curricular practice and how preservice teachers work with students with special needs in middle and secondary levels. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| SPE | 422 | Methods and Technology for High-Incidence Disabilities | Assessment and instructional methods for students with high-incidence disabilities including mild intellectual disabilities, learning disabilities, emotional disabilities, and physical/health impairments. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): senior standing |
| SPE | 423 | Methods of Cross-Categorical Special Education I | Focuses on implementing research-based strategies in reading, language arts, math and language for students with mild/moderate special needs. Includes using data from all stakeholders in the development of the IEP, making instructional decisions using assessment data, monitoring student progress and developing lesson plans. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 424 | Methods of Cross-Categorical Special Education II | Emphasizing pedagogy, content knowledge and evidence-based strategies, focuses on assessment, curriculum development and instruction across content areas (e.g., reading, language, writing, mathematics, science, social studies) for students with low-incidence disabilities or intensive support needs (e.g., significant intellectual disabilities, multiple disabilities, orthopedic impairments [OI], and other health impairments [OHI]). Particular focus includes access to the general curriculum, inclusion, instructional and assistive technologies, communication and language development and disorders, and transition for this population. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 430 | Professional Practices, Foundations, and Collaborative Teaching in Special Education | Foundations of special education; effective collaboration and communication skills and co-teaching models that promote inclusive practices. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 431 | Collaborative Teaching Methods for General Education Classroom Environments | Methods and issues in cooperative teaching for special education students in general education classrooms. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 478 | Student Teaching in Special Education | Supervised student teaching in the delivery of special education services. Synthesized experience in curriculum, instruction, classroom management and collaboration. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 8 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPE | 495 | Student Teaching in Early Childhood Special Education | Supervised teaching in the early childhood special education classroom setting. Synthesizes experience in curriculum, instruction, classroom organization, and guidance of young children. | N | PRA | N | YGB | MaryLouFulton Teachers College | Division of Teacher Preparation | 6 | | Prerequisite(s): senior standing |
| SPE | 496 | Field Experience III | Applies course content in a special education setting. Emphasizes observation pupil management, planning and delivering instruction, and assessment. | N | PRA | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |

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| SPE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): admission to Professional Teacher Preparation Program |
| SPE | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only COE 501 or ECD 503 or PPE 501 or SPE 501 or TEL 501 |
| SPE | 512 | Individuals with Intellectual Disability | Etiology, diagnosis and management of individuals with intellectual disability. Current trends in prevention, programming and teacher preparation. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking). Credit is allowed for only SPE 312 or SPE 512 |
| SPE | 520 | Reading and Communication Strategies for Individuals with Autism | Understands and applies reading and communication strategies with individuals with autism and related disorders. Includes historical, diagnostic, and identification issues. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 521 | Foundations of Autism Spectrum Disorders | Increases the understanding of characteristics of individuals with autism. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 524 | Effective Classroom Behavior Management | Organization and delivery of instruction including formative evaluation and techniques of academic behavior management for exceptional children. Requires practicum. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 531 | Methods of Applied Behavior Analysis for Exceptional Populations | Methods based on the principles and concepts of applied behavior analysis. Students learn to operationally define problem behavior, conduct functional behavior assessment and generate recommendations for the development of behavior analytic interventions. Students gain knowledge and understanding of specific scientifically valid behavior change procedures. Discusses and applies their corresponding literature base. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 534 | Assessment and Evaluation for Children with Special Needs | Discusses assessment practices related to student eligibility and program planning. Emphasizes authentic, individualized, interdisciplinary practices. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 535 | Curricula, Methods, Technology, and Adaptations in Special Education | Develops strategies for effective adaptation of special education and general education curriculum through use of technology. Includes methods for addressing special needs in reading, math and language disorders. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 536 | Characteristics of Children with Behavioral Disorders | Variables contributing to behavior patterns of behaviorally disordered children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 538 | Language and Literacy I | Focuses on the theoretical knowledge and pedagogical skills necessary to equip future teachers to plan and implement high-quality reading and writing instruction in a classroom setting. Course objectives and topics are aligned to standards for reading and research from the International Reading Association (IRA), Arizona College and Career Ready Standards (ACCRS), Interstate Teacher Assessment and Support Consortium (InTASC) standards, and the National Reading Panel Report (2000). Focuses on reading readiness, language development, phonemic awareness, phonics, fluency, vocabulary and comprehension. Presents strategies and assessments to support struggling readers as well as a variety of ability levels and cultural and linguistic backgrounds to include English language learners. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Teachers College graduate student; Credit is allowed for only RDG 531 or SPE 538 |
| SPE | 540 | Family-Centered Practices | Provides definitions, models, activities and exploration in the various roles in collaboration, consultation and teamwork in the field of special education. In-depth exploration of connections with families, professionals and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 541 | Consultation Frameworks and Issues | Models, activities, and roles of educational consultants working with families, professionals, and support personnel across disciplines and agencies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 548 | Cross-Categorical Foundations: LD, ED, MR, & PI/OHI | Foundations course compares cognitive, motor, and affective developmental and educational issues across LD, ED, MR, and PI/OHI. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 555 | Inclusive Practices for Diverse Learners | Adapting instruction and assessment to meet the needs of all learners in inclusive settings. Includes the creation of plans to address challenging classroom behaviors. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SPE | 559 | Methods for Teaching Diverse Learners | Apprentice teachers select a specific population, based on placement (mild to moderate or moderate to severe), for individualized investigation. Utilizes practical strategies for curriculum development and IEP implementation. Gains a deeper understanding of their practice by analyzing and reflecting for the purposes of monitoring and adjusting instruction. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: MEEd Special Education (Teacher Certification) major |
| SPE | 561 | Characteristics/Diagnosis of Learning Disabilities | Theories related to learning disabilities, including identification and characteristics. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 565 | Behavior Change Systems | Focuses on applied behavior analysis-based behavior change systems and procedures. Students learn to identify, implement, manage and supervise interventions based on fundamental elements of behavior change. Addresses behavior change considerations, including ethical use of behavior change systems and ongoing data collection for fidelity and progress monitoring. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate |
| SPE | 566 | Applied Behavior Analysis in Inclusive Settings | Examines definitions, characteristics, assumptions and basic principles of applied behavior analysis. Describes and applies fundamental elements of behavior change, including reinforcement schedules, modeling, shaping, chaining and other behavior change procedures. Activities center on the design and delivery of social skill interventions with individuals with special needs in inclusive settings. | N | REC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 567 | Ethics of Applied Behavior Analysis | Addresses knowledge and application of the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts. Examines and resolves ethical dilemmas which may be encountered by behavior analysts. Addresses roles and responsibilities of members of a multidisciplinary treatment team comprised of educators, behavior analysts, parents, learners and other professionals. Students conduct risk-benefit analysis of evidence-based treatment approaches and develop declarations of professional practices and procedures for behavior analysts. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 568 | Behavior Assessment | Focuses on critical aspects of applied behavior analysis, experimental design and the identification and implementation of effective assessment methodologies. Addresses client-centered responsibilities of the behavior analyst including problem identification, measurement, assessment, data collection and analysis. Students gain experience conducting functional behavior assessment and stimulus preference assessment to inform intervention design. Emphasizes measuring and ensuring treatment integrity. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): SPE 531; SPE 566; degree- or nondegree-seeking graduate. Credit is allowed for only SPE 568 or SPE 598 (Behavioral Assessment) |
| SPE | 569 | Research Methods in Applied Behavior Analysis | Students gain expertise and practical experience in the interpretation and application of experimental design to inform decision making. Focuses on evaluation of the effectiveness of interventions through use of behavior analytic technologies in clinical and applied settings. Students learn to interpret and describe behavior in behavior analytic terms and explain concepts and approaches in everyday language. Students research and evaluate skill assessment approaches through strategic review of the behavior analytic literature. Course addresses single-subject methodologies to inform design and delivery of effective instruction and clinical interventions. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking); SPE 531; SPE 566; Credit is allowed for only SPE 569 or SPE 598 (Research Methods Applied Behavioral Analysis) |
| SPE | 572 | Testing and Measurement in Gifted Education: Methods | Covers current and historical aspects of testing and measurement in the field of gifted education. Topics include: the history and purposes of IQ testing, definitions of various types of tests, purposes of testing for gifted education services, ability tests and achievement measures, how tests are used in Arizona in programs for gifted learners. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); I Credit is allowed for only SPE 572 or 591 (Testing&Measurement Gifted Ed) |
| SPE | 573 | Differentiating Instruction for Gifted Learners: Teaching Methods | Explores the design of differentiated curriculum and instruction for gifted learners in elementary and secondary education | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisite: Graduate student (degree seeking or nondegree seeking); Credit is allowed for only SPE 573 or 591 (Diff Curriculum Gifted Child) |
| SPE | 575 | Survey, Issues, and Foundations for the Exceptional Student | Explores the foundations of special education through characteristics and eligibility of exceptional students. Analyzes historical, political, social, and legal factors impacting special education services for exceptional students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 576 | Clinical Experience | Applies course content in special education classrooms: observation, pupil management, planning and delivery of instruction, and assessment. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | Prerequisite(s): Valid copy of AZ DPS fingerprint card on file at ASU; MEEd in Special Education major |
| SPE | 578 | Student Teaching in Special Education | Supervised teaching for graduate students. Synthesized experience in classroom management, curriculum, instruction and assessment. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SPE | 579 | Apprentice Teaching in Special Education | Apprentice teaching in special education setting. Synthesized experience in classroom management, curriculum, instruction and assessment. Must be taken four times for a total of 12 semester hours. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 585 | Creativity: Foundations of Research and Development in Gifted Education | Explores nature of creativity in terms of philosophical underpinnings, empirical evidence, human development, self-actualization, and the ecology surrounding the creative event. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 586 | Advising the Gifted Learner: Social and Emotional Needs | Focuses on educational planning and guidance, social and emotional development, and family problem solving regarding needs of gifted children. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 587 | Special Populations in Gifted Education | In-depth analysis of major controversies in educating the gifted, including nature/nurture, the role of mental tests, and sex differences. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 588 | The Gifted Learner: Foundations of Identification, Education and Development | Gifted children's characteristics, identification, needs, school and home environments, definitions, and misunderstandings. Research by Pressey, Stanley, Terman, and others. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 589 | Teaching the Gifted Learner: Models, Methods, and Programs | Methods in teaching elementary and secondary school gifted children, including individualized and computer-assisted instruction, team teaching. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: postbaccalaureate undergraduate or graduate student (degree seeking or nondegree seeking) |
| SPE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 597 | Capstone | Applies theoretical and practical information presented through coursework in a real-world setting. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SPE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre-requisite: Special Education Graduate student |
| SPE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Graduate student |
| SPE | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPE | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre-requisite: Special Education Doctoral student |
| SPE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre-requisite: Special Education Doctoral student |
| SPF | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 301 | Culture and Schooling | For the professional teacher preparation program. Overview of the cultural, social, and political milieus in which formal schooling takes place in the United States. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L | Pre-requisites: ENG 102, 105 or 108 with C or better |
| SPF | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |
| SPF | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SPF | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| SPF | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SPF | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-7 | | |

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| SPF | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| SPF | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SPF | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |

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| SPF | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SPF | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Pre Requisite: Must be Post Bacc UG, Non Degree Graduate or Degree Graduate |
| SSH | 100 | Introduction to Global Health | Current global health crises, challenges; tools for describing health and disease; ecological, cultural, social, historical, political-economic factors; comparative health systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G | Credit is allowed for only ASB or SSH 100 |
| SSH | 194 | Covers topics of immediate or special interest to a faculty member and students. | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 201 | Epidemics and Outbreaks | Covers epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. Other topics include quantitative aspects of epidemiology, including data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. A background in basic biology and a basic understanding of the principles of human diseases helpful in succeeding in this course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Credit is allowed for only ASM 201, SSH 201 or 294 (Introduction to Epidemiology) |
| SSH | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 300 | Food and Culture | Uses the case of food to explore how culture shapes human well-being, including the impact of political-economic systems on what we have and chose to eat. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & C | Pre-requisite: ENG 101, 105, 107, or ENG 111; Credit is allowed for only ASB or SSH 300 |
| SSH | 301 | Global History of Health | Examines disease and health transitions in broadest context of human history, from primate ancestors to hunter-gatherers, to transcontinental contact, colonialism, industrialization, urbanization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & G & H | Pre-requisites: SSH 100, ASB 100, HST 100, or HST 101 with C or better; Credit is allowed for only ASB, HST or SSH 301. |
| SSH | 314 | HIV/AIDS: Science, Behavior, and Society | Overview of the basic biological, behavioral, and psychosocial aspects of HIV disease and AIDS. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MIC 314 or SSH 314 |
| SSH | 355 | Traditional Medicine and Healing | In-depth study of world views, practices, and roles of shamans and traditional and contemporary healers. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | HU or SB | Credit is allowed for only ASB or SSH 355 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SSH | 370 | Production, People, and Environments | Uses social scientific theories and principles to understand the political economy of production and pathways toward sustainable production. Production systems are systems of technology applied to the labor process. Examines the social shaping of production technologies, as well as the impacts of global, industrial production on the health of workers and communities and the natural environment. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | L or SB | Pre-requisites: ENG 102, 105 or 108 with C or better; ASB 100 (or 102), SOC 101, SOS 110, or SSH 100 with C or better; Credit is allowed for only ASB, SOC, SOS or SSH 370 |
| SSH | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 400 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| SSH | 401 | Health and Human Biology | Health and biology in contexts of human evolutionary history, biological and cultural variation, lab-based health status assessments, core concepts of human variation. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-4 | | Pre-requisites: ASB 100 (or ASM 104); SSH 100; Credit is allowed for only ASM or SSH 401 |
| SSH | 402 | Community Partnerships for Global Health | Supervised community-based activities relevant to a global perspective on contemporary U.S. health. Addresses community-identified issues using appropriate methodologies. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | SB | Pre-requisites: Minimum 45 credit hours; SSH 100 or ASB 100; Credit is allowed for only ASB 452 or SSH 402 |
| SSH | 403 | Cross-Cultural Studies in Global Health | Direct investigations of society, ecology, and health in international settings. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-6 | (L or SB) & G | Pre-requisites: SSH 100 or ASB 100; Credit is allowed for only ASB 443 or SSH 403 |
| SSH | 404 | Medical Anthropology: Culture and Health | Role of culture in health, illness, and curing; health status, provider relations, and indigenous healing practices in United States ethnic groups. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB & C | Credit is allowed for only ASB 462 or SSH 404 |
| SSH | 405 | Senior Seminar in Global Health | Students create health solutions, integrating theoretical, methodological, ethical, and experiential learning related to the global health major. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Pre-requisites: Global Health major; Minimum 87 hours; SSH 100 or ASB 100 and SSH 403 or ASB 443 with C or better; Credit is allowed for only ASB 455 or SSH 405 |
| SSH | 414 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | SB | Prerequisite(s): ASB 100, 102, 222, 223, AML 100, ASM 104 or SSH 100 with C or better; minimum 45 hours; Credit is allowed for only ASM 414 or SOS 414 or SSH 414 |
| SSH | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | | Prerequisite(s): Barrett Honors student |
| SSH | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SSH | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-4 | | |
| SSH | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-7 | | |
| SSH | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-3 | | |
| SSH | 502 | Professional Seminar in Global Health | Focuses on skills, ideas, and practice related to the Global Health MA and PhD at Arizona State University. Seminar. Prerequisite: Must be a graduate student in the Global Health degree program. | N | SEM | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Pre-requisite: Must be a graduate student in the Global Health degree program |
| SSH | 503 | Medical Anthropology | Theory in medical anthropology and cross-cultural studies that illustrate particular theories. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 510 | Health: Social and Biocultural Theories | Comparative and critical approaches to complexities of health, drawn from anthropology and related fields. Focuses on theories that address how social and cultural factors shape human health. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 512 | Social Science Applications in Community Health | Supervised community-based activities relevant to improvement of health through application of social science theory. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 3-9 | | Pre-requisites: ASB 511 or SSH 511; Graduate (degree or nondegree) student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
|---------|-------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------------------|-------|-----------------|----------------------------------------------------------------------------------------------------------------------------|
| SSH | 514 | Urban and Environmental Health | Integrates theory and practice of social sciences (including anthropology, demography, and human geography) to understand environmental contexts of health, particularly urban. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 4 | | |
| SSH | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | |
| SSH | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | LEC | Y | Z3 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SSH | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Human Evolution & Social Change | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 220 | Introduction to Social Transformation | Introduces key concepts in the study of social change, social innovation, and social transformation. Studies examples of social movements, social activism, community organizing, and coalition building and how such efforts have transformed society and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only APA 220 or JUS 220 or SST 220 |
| SST | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| SST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 428 | Critical Race Theory | In-depth analysis of the ways in which race has been historically utilized, constructed, and contested in American civil society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Minimum 36 hours; Credit is allowed for only AFR, APA, JUS or SST 428 |
| SST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| SST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| SST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| SST | 501 | Foundations of Social Transformation | Introduces the foundations of social transformation and social change. Looks at social transformation through an interdisciplinary lens and explores the connections between the objective and subjective factors that enable or inhibit social transformation in different contexts. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 510 | Social and Cultural Pedagogy: Theoretical and Practical Issues | Engages students with the academic literature and scholarly debates on social and cultural pedagogy, reviews practical lessons from the field, and provides an overview of different areas of intervention and professional practice. Considers the historical, local, and international dimensions of social and cultural pedagogy, illustrating them with selected case studies. Encourages the study of social and cultural pedagogy using a critical and interdisciplinary perspective. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| SST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| SST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| SST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |

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| SST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| SST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| STC | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 505 | Theories of Social Technology | Examines key theories of social technologies from social and behavioral perspectives. Examines the political dimensions of technologies; technology's role in constructing social structures; and how mobile technologies encourage, structure and delimit social interaction. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 510 | Applied Social Technology | Provides participants with a foundation for understanding how technological systems, large and small, relate to organizational and social change. Case-based approach focuses on how to assess and recommend changes to a variety of types of organizations and communities. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 520 | Advocacy and Social Technology | Examines the potential for social technology in advocating for social change. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 525 | Politics and Social Technology | Concerns the political implications of social technology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 530 | Technology and Collaboration | Examines the analysis, design, implementation and implications of systems intended to support collaboration. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 535 | Networked Social Technology | Surveys human and social behaviors from the perspective of networks, with an emphasis on social technology. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 537 | Community Informatics | Examines the ways in which communities form, manage themselves, and improve through the use of networked technologies. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 540 | Critical/Cultural Approaches to Social Technology | Examines critical and cultural studies approaches to social technologies. Explains a critical/cultural studies approach to social issues and the cultural and social dimensions of technologies. Explores how social technologies both shape and are shaped by power and how cultural understandings of technology contribute to the shaping of everyday life. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 545 | Games as Social Technology | Explores how games as networked and collaborative technologies facilitate community formation, interaction and development. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | REC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STC | 598 | Special Topics | Topical courses not offered in regular course rotation--e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Social and Behavioral Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STM | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |

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| STM | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| STM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | PRA | Y | Z1 | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| STM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-4 | | |
| STM | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Ira A. Fulton Engineering | Dean, Ira A. Fulton Schools of Engineering | 1-12 | | |
| STP | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | Prerequisite: Freshman status; Maximum 25 earned hours |
| STP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 220 | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | |
| STP | 220 | Conceptual Statistics | Treats the concepts and vocabulary needed to evaluate statistical reports on health, technology, and society. Aggressively emphasizes understanding over computation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s): MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 226 | Elements of Statistics | Basic concepts and methods of statistics, including descriptive statistics, significance tests, estimation, sampling, and correlation. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s): MAT 117 or MAT 142 or other course meeting General Studies MA requirement with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 231 | Statistics for Life Science | Concepts and methods of statistics; display and summary of data, interval estimation, hypothesis testing, correlation, regression. Applications to biological sciences. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s): MAT 117 or 142 with C or better or completed the Mathematics Placement Test with a score of 50% or higher |
| STP | 280 | Probability and Statistics for Researchers | Methods for data summary, numerical summary measures, probability concepts, discrete and continuous probability distributions, expected values, statistics, sampling distributions, point estimation, and introduction to statistical inference for a single parameter. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 251, 265, or 270 |
| STP | 281 | Statistical Analysis for Researchers | Confidence intervals, hypothesis testing, one- and two-factor analysis of variance, simple linear regression, multiple regression, chi-square tests, and introduction to statistical quality control. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 280 |
| STP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 310 | Design and Analysis of Experiments | Factorial and nested designs, randomized designs, randomized complete block designs, Latin squares, fixed and random effects, expected mean squares, multiple comparisons, and analysis of covariance. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: MAT 266 (or MAT 271); STP 281 |
| STP | 311 | Regression and Time Series Analyses | Simple linear regression, multiple linear regression, indicator variables, influence diagnostics, stepwise selection, logistic regression, introduction to time series models, autocorrelation, and some ARIMA models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisites: MAT 266 (or 271); STP 281 |
| STP | 315 | Statistical Computing | Statistical techniques using a professional statistical programming language (e.g., SAS, R). Emphasizes correct methods, writing and presentation of results | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 281; STP 310 (or STP 311) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| STP | 326 | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ACT 415 or STP 326 |
| STP | 326 | Intermediate Probability | Probability models and computations, joint and conditional distributions, moments, and families of distributions. Topics in stochastic processes, simulation, and statistics. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Pre-requisites: MAT 210, MAT 251, MAT 265 or MAT 270 with C or better; Credit is allowed for only ACT 415 or STP 326 |
| STP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 420 | Introductory Applied Statistics | Introductory probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, regression analysis, analysis of variance, and nonparametric tests. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | CS | Prerequisite(s): MAT 210 (or MAT 251, 265 or 270) with C or better |
| STP | 421 | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | 421 | Probability | Laws of probability, combinatorial analysis, random variables, probability distributions, expectations, moment-generating functions, transformations of random variables, and central limit theorem. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisites: MAT 272 or 267 with C or better |
| STP | 425 | Stochastic Processes | Markov chains, stationary distributions, pure jump processes, 2-D order processes, and other topics in stochastic processes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisites: MAT 342 (or 343); STP 421 with C or better. |
| STP | 427 | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | 427 | Mathematical Statistics | Limiting distributions, interval estimation, point estimation, sufficient statistics, and tests of hypotheses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s) with C or better: ACT 415 or STP 421; STP 281 or 420 |
| STP | 429 | Experimental Statistics | Statistical inference for controlled experimentation. Multiple regression, correlation, analysis of variance, multiple comparisons, and nonparametric procedures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | CS | Pre-requisites: STP 420 with C or better |
| STP | 450 | Nonparametric Statistics | Rank- and order-based tests and estimation procedures for 1 sample and 2 or more related or independent samples, measures of correlation, and introduction to resampling methods, including bootstrap and randomization tests. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 310 |
| STP | 451 | Quality Improvement | In-depth concentration on statistical process control for attribute and variables data, process capability analysis and measurement systems analysis. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): STP 281 |
| STP | 452 | Multivariate Statistics | Statistical analysis of multivariate data including methods for preparation and presentation of multivariate data, MANOVA, discriminant analysis, principal component analysis, factor analysis, cluster analysis, random forests and classification trees. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: STP 311; MAT 343 |
| STP | 460 | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | 460 | Categorical Data Analysis | Statistical methods for the analysis of categorical (discrete, count) data. Topics include exact and approximate tests and confidence intervals for one- and two-binomial proportions, contingency tables, generalized linear models, logistic regression and loglinear models. | N | LEC | N | GNA | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Prerequisite(s): STP 310, 311; MAT 272 |
| STP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z2 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | 485 | Statistics Capstone | Students work in a team and partner with a client to solve a real-world problem requiring statistical analyses. Emphasizes problem development, integration of technical skills, teamwork and communication among the students and with the client. Requires regular meetings and presentations with team, client and faculty advisor. | N | LEL | N | YGB | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 3 | | Pre-requisite: Senior standing; STP 310, 311, 6 additional hours of upper-division STP excluding STP 492, 493, 498, 499 |
| STP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |

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| STP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| STP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| STP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | |
| STP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | |
| STP | 495 | Undergraduate Research | Supervised research in statistical or probability studies. | N | RSC | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only MAT 494 (UG Research in Math) or STP 495 |
| STP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-7 | | |
| STP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-7 | | |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-3 | | |
| STP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-3 | | |
| STP | 501 | Theory of Statistics I: Distribution Theory 3 | Introduces rigorous probability theory, including distributions and expectations of random variables, transformations of random variables and order statistics, generating functions and basic limit concepts. Supplements the understanding of applied statistics with a firm grasp of the probabilistic underpinnings of theoretical statistics. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): graduate student (degree seeking or nondegree seeking); Credit is allowed for only STP 501 or STP 598, Theory of Statistics I |
| STP | 502 | Theory of Statistics II: Inference | Presents techniques and basic results of mathematical statistics at a rigorous level. Develops the structure of statistical inference procedures, including the principles of data reduction, theory of estimation, confidence sets, hypothesis testing, and prediction for common parametric models. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): STP 501 with B- or better; Credit is allowed for only STP 502 or STP 598, Theory of Statistics II |
| STP | 526 | Theory of Statistical Linear Models | Multinomial distribution, distribution of quadratic forms, full and nonfull rank models, generalized inverses, unbalanced data, variance components, and the large sample theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 527 | Statistical Large Sample Theory | Types of convergence, central limit theorems, theory of maximum likelihood estimation, efficiency, robustness, influence functions, theory of bootstrap methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 530 | Applied Regression Analysis | Method of least squares, simple and multiple linear regression, polynomial regression, analysis of residuals, dummy variables, and model building. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 531 | Applied Analysis of Variance | Factorial designs, balanced and unbalanced data, fixed and random effects, randomized blocks, Latin squares, analysis of covariance, and multiple comparisons. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 532 | Applied Nonparametric Statistics | One-sample test, tests of 2 or more related or independent samples, measures of correlation, and tests of trend and dependence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| STP | 533 | Applied Multivariate Analysis | Discriminant analysis, principal components, factor analysis, cluster analysis, and canonical correlation. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 535 | Applied Sampling Methodology | Simple random, stratified, cluster sampling; variance estimation in complex surveys; nonparametric superpopulation approaches; nonresponse models; computational methods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 581 | Statistical Consulting Clinic | Provides practical experience in the application of statistical theory and methods to problems from a wide variety of disciplines, exposing students to a diverse range of data types and clients. Develops nontechnical consulting skills, for example explaining statistical concepts to non-statisticians, writing reports, and making oral presentations. | N | PRA | Y | GNA | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 3 | | Prerequisite(s) with B or better: STP 530, 531; Credit is allowed for only STP 581 or 598 (Statistical Consulting) |
| STP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-12 | | |
| STP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Mathematical and Natural Sciences | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| STP | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-12 | | |
| STP | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |
| STP | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1 | | |
| STP | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Mathematical and Statistical Sciences | 1-15 | | |

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| STS | 101 | Introduction to Science, Technology, and Society | Overview of the basic issues, definitions, and literature involved in the study of science, technology, and human systems. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 110 | Global Technology and Development | Introduces awareness and understanding of how technology, processes of globalization, and society influence one another. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 202 | Science, Technology, and Diversity | Examines the concept and meaning of the "technology gap" and its implications of the global impact of scientific and technological advances. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 235 | Technology and Urban Systems | Focuses on the relationship between technology and urbanization, especially on how technological innovation and change impact all aspects of urban systems, including urban social and economic development, sustainability, governance, environmental, and community change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 250 | Science, Society, and Global Warming | Addresses global warming and its implications for society, including evidence and components of warming, measurement of warming and global change, and the social and political aspects of change. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Students who have credit for STS 294 (Society and Global Warming) may not enroll in STS 250 |
| STS | 260 | Politics of Science and Technology | Explores the relationship among government, politics, science, and technology, especially the interdependence of public policy and science and technological pursuits. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 301 | Research in Science and Technology Studies | Examines methods of inquiry in the social sciences with emphasis on STS, including both qualitative and quantitative approaches, philosophy of science, and scientific revolutions. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 302 | Philosophy of Science and Technology | Focuses on the nature and implications of science as a body of knowledge, set of practices, specific methods, and how these differ from other human enterprises and activities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| STS | 303 | History of Science and Technology | Examines the history of technology within social, cultural, political, and economic contexts and the critical relationship between society and technology. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | H | Prerequisite(s): minimum 45 hours |
| STS | 304 | Science, Technology, and Society | Overview of the major issues associated with the study of science, technology, and human systems, including theoretical approaches. Credit is given for only STS 304 or 101. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 305 | Science and Social Theory | Explores the different theoretical traditions that inform social interpretations of science, including awareness of the historical traditions that define these interpretations. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 306 | Social Effects of Science and Technology | Examines the effects of science and technology on social life and the contexts in which those effects manifest. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 317 | Science, Technology, and Global Engagement | Overview of international issues associated with both the development and deployment of technologies, including matters concerning international relations. Credit is given for only STS 317 or 110. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | Credit is allowed for only STS 110 or 317 |
| STS | 318 | Science, Technology, and Government | Examines the foundations of the interrelationship of science, technology, and democratic governance, with emphasis on the American political system. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 325 | Science, Technology, and Public Policy | Examines the interaction of science and technology with American domestic policy. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 328 | Science, Technology, and Culture | Overview of technology and international cultures, including cultural definitions of science and technology. May intersect issues of culture and religion. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 329 | Cultivating Technology in Newly Industrializing Countries | Covers specific issues relating to building technological capability in newly industrializing countries. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 330 | Information Technology and Globalization | Examines the intersection of advances in information technology and globalization and the impact of these processes on human systems. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 331 | Ethical Issues in Science and Technology | Examines the interconnections between values and science and technology by examining such topics as computers and privacy, medical malpractice, reproductive technologies, patents, and hazardous facilities. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 332 | Global Issues in Science and Technology | Examines contemporary international debates in science and technology and how those issues impact globalization. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & G | |
| STS | 364 | Science, Technology, and National Security | Examines how changing technologies impact all aspects of national security policy in the United States. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | Prerequisite(s): minimum 45 hours |
| STS | 385 | Technological Catastrophes | Interdisciplinary examination of the human, organizational, and technical factors contributing to the causes and impacts of major technological accidents. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |

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| STS | 401 | Statistics in Science and Technology Studies | Introduces statistical techniques for the social sciences, including the role and rationale of statistics, descriptive measures, associational measures, and inferential statistics. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | CS | Pre-requisites: MA general studies requirement satisfied |
| STS | 425 | Law, Values, Science, and Technology | Examines the interconnections of law, values, and science and technology with a view to establishing their reciprocal relationships. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB | |
| STS | 480 | Technology, Ethics, and Society | Technology in modern society; focuses on the relation between technology and personal, cultural, economic, and political values. | N | SEM | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | |
| STS | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| STS | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| STS | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-7 | | |
| STS | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| SWG | 501 | Micro Human Behavior in the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre/Co-requisite: masters or doctoral in Social Work major |
| SWG | 502 | Macro Human Behavior in the Social Environment | Human behavior in the social environment, focusing on groups, organizations and communities and examining theoretical perspective in a macro context. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite: MSW or DSW student |
| SWG | 510 | Foundation Practice I | Basic social work methods with emphasis on the problem-solving process as it pertains to individuals, families, and small groups. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Must be Master or Doctor Social Work student. |
| SWG | 511 | Foundation Practice II | Theory and methods of direct practice with groups and selected practice models. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG 510 with C or better |
| SWG | 514 | Bridge Seminar I | Professional social work practice at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 516 |
| SWG | 515 | Bridge Seminar II | Generalist practice problem-solving skills with diverse individuals, groups, families and systems at the master's level. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Adm and Community Practice) major. Corequisite(s): SWG 516. Pre- or corequisite(s): SWG 514. Credit is allowed for only SWG 515 or SWG 598 (Bridge Seminar II) |
| SWG | 516 | Social Work Skills Seminar | Focuses on the acquisition of practice skills for advanced interaction with individuals, families, groups and communities. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 514, 515 |
| SWG | 519 | Research Methods in Social Work | Conceptual foundations and methods of nomothetic research in social work. Includes problem identification, hypothesis formulation, measurement, sampling, and experimental design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 526 | Mental Health for Sentencing | Helps justice system professionals understand existing mental health diagnoses, the DSM-5, and how specific DSM-5 categories are associated with specific types of crime. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 527 | Mitigation of Death and Life Cases | Issues and skills for practicing as a mitigation specialist in cases of death and life without parole. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 528 | Presentence Investigations | Examines the functions and objectives of presentence investigation reports and prepares students to perform different types of investigations for limited and general jurisdiction courts for local, state and federal courts. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 529 | Alternatives Penal Sanctions | Prepares individuals to practice as sentencing advocates on defense teams, as consultants to problem-solving courts, or as private presentence investigators hired by the defense to advocate for alternatives to incarceration. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 531 | Social Policy and Services | Conceptual, analytical, and historical perspectives on the social welfare institution. Emphasizes poverty and inequality. Principles of policy analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral of Social Work student |
| SWG | 533 | Diversity and Oppression in a Social Work Context | Explores issues of social inequality related to disability, ethnicity, gender, race, and sexual orientation. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student. |

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| SWG | 541 | Field Practicum I | With SWG 542, two consecutive semesters (480 hours) of supervised social work practice in an approved placement. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Master or Doctor Social Work student; Pre/Co-requisite: SWG 510 with C or better if completed |
| SWG | 542 | Field Practicum II | See SWG 541 | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Master or Doctor of Social Work major; SWG 510 and 541 with C or better. Pre- or corequisite(s): SWG 511 with C or better if completed |
| SWG | 554 | Substance Abuse | Psychological and sociocultural determinants of substance abuse. Overview of social policies and treatment approaches. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 556 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 456, 556 or 591 (Immigrants and Refugees) |
| SWG | 557 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWG | 558 | Introduction to Behavioral Health Services | Explores mental health. Develops a basic understanding of mental health and co-occurring conditions. Gains an understanding of public- and employer-financed contemporary behavioral health services with a focus on Arizona models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Introduction to Behavioral Health Services) or 558 |
| SWG | 559 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 459, 591 (Spirituality & Helping Profession), 598 (Spirituality and the Helping Professions) or 559 |
| SWG | 560 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 458, 591 (Legal Issues in Social Work) or 560 |
| SWG | 561 | Lesbian, Gay Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWU 461, 498 (Lesbian and Gay Issues) or 561 |
| SWG | 562 | Global Social Welfare | Analyzes social work's response to international social issues and human need from the perspectives of globalization, development and human rights. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 562 or SWG 591 (International Social Work) or SWU 462 or SWU 498 (International Social Work) |
| SWG | 570 | Aging: A Biopsychosocial/Spiritual Perspective | Biopsychosocial/spiritual perspectives on aging, including intergenerational matters, international trends, policies, programs, services and issues unique to populations of the Southwest. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 570 or SWG 591 (Aging Soc Wk Perspective) |
| SWG | 571 | Mental Health Aspects of Aging | Older adult mental health assessment, treatment, planning, policy and service delivery from a cross-cultural, interprofessional, intergenerational, international and continuum-of-care perspective. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only GIT 573 or 598 (Mental Health & Aging) |
| SWG | 572 | Interprofessional Approaches to Healthy Aging | In-depth examination of healthy aging, interprofessional practice and interprofessional practice approaches designed to foster healthy aging for older adults. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 577 | Traumatic Death: Theory, Counseling and Practice | Explores the various experiences of grief, trauma and bereavement through a phenomenological perspective and using creativity, art, literature, poetry, indigenous wisdom and evidence-based research. Practice techniques and psychosocial care to the traumatically bereaved. Examines the micro, mezzo and macro aspects of death and grief in contemporary society. Theory, philosophy and direct practice with individuals, families and groups experiencing traumatic death and grief. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only SWG 577, 591 (Trauma & Death Counseling) or 598 (Trauma&Death: Counseling, Theory, &Practice Issues) |
| SWG | 579 | Critical Incident Stress Management | Theory and research behind coping strategies and mechanisms commonly experienced by Emergency Management Teams (EMT) and DHS. Explores topics of stress, trauma, vicarious trauma and mass trauma as experienced by the individual and large populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 585 | Macro Social Work Practice | Examines communities and human service organizations as social systems. Introduces strategies for initiating planned change. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Masters or Doctoral Social Work student |
| SWG | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| SWG | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisites: Master Social Work student |
| SWG | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 600 | Foundation for Advanced Practice | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Master Social Work student. |
| SWG | 603 | Social Work Practice in Health/Behavioral Health Settings | Advanced social work practice in health and behavioral health settings, focusing on enhancement of client functioning and quality of life. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 604 | Advanced Social Work Practice in Health | Addresses the crucial social work practice issues of health and healthcare in the new millennium. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 with C or better |
| SWG | 606 | Assessment of Mental Disorders | Theories and concepts of mental health and illness. Attention to classification systems and nomenclature used in assessing mental disorders. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 502 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 608 | Ecological Approach to Practice with Children, Youth, and Families | Provides a theoretical and practical orientation to working with children, youth, and families from an ecological strengths perspective. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 609 | Advanced Social Work Practice with Child Welfare Families | Focuses on substance abuse, family violence, and serious mental illness in practice with families and children in the child welfare system. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 610 | Advanced Social Work Practice III | Assists students in advanced theoretical understanding and practice with families, groups, and communities. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW or MSW Adv Standing student; Co-Requisite: SWG 693 and 645 |
| SWG | 611 | Social Work with Families | Theory, concepts, and skills for working with diverse family populations. Emphasizes a systems and integrative approach. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 612 | Social Work with Groups | Practices applications of knowledge and skill to social work with groups. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 613 | Advanced Social Work Practice in Behavioral Health | Treatment of prevalent disorders encountered by social workers, selected from the following: anxiety disorders, personality disorders, depression, and schizophrenia. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 603 with C or better |
| SWG | 614 | Advanced Generalist Social Work Practice IV | Integrates a multilevel approach to practice with critical choice theories and interventions. Focus on groups, organizations, and communities and their impact on social work practice. Completion of the foundation courses or advance standing in the MSW program, or instructor approval, is required for all 600-level SWG courses. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student; SWG611 with a grade of C or better |
| SWG | 617 | Advanced Social Work Practice with Children and Adolescents | Theory, research, and intervention that focus on children and adolescents. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 608 with C or better |
| SWG | 618 | Advanced Practice in Domestic Violence | Theory, research, intervention, and prevention strategies relevant to child maltreatment, partner abuse, and elder abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 619 | Practice-Oriented Research | Accelerated course in application of scholarly and scientific principles to field practice, problem formulation, interventional procedures, and impact assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 519 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 621 | Integrative Seminar | Explores the fit between theoretical frameworks and practice with clients. Requires presentation of empirical studies with clients. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s) with C or better: SWG 603 or SWG 608, 619. Pre- or corequisite(s): SWG 604, 606, 609, 613, 617 with C or better if completed; SWG 641 with Y if completed |
| SWG | 623 | Program Evaluation | Research design techniques and data collection in human service agencies and communities. Analysis for program evaluation and needs assessment. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 519 with C or better, SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major. Corequisite(s): SWG 685 |
| SWG | 626 | Crisis Intervention and Short-Term Treatment | Comprehensive analysis of crisis and solution-focused brief intervention strategies and approaches used in advanced social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 630 | Brief Social Work Intervention | Concepts and techniques of solution-focused, systematic, and strategic approaches to therapy in the context of brief therapy. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major |

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| SWG | 632 | Policy Practice | Develops advanced knowledge and skills in social welfare policy analysis, policy formulation, and advocacy and intervention for policy change. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 531 with C or better or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 633 | Child Welfare Services | Examines, using ecological and system theories, services that supplement, support, and substitute for parental care of children. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 641 | Advanced Practicum: Direct Practice I | With SWG 642, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) major. Pre- or corequisite(s): SWG 603 (or SWG 608) with C or better if completed |
| SWG | 642 | Advanced Practicum: Direct Practice II | With SWG 641, two consecutive semesters (480 hours) of supervised social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 603 or 608 with C or better; SWG 641 with Y; Pre or Co-requisite: SWG 604, 609, 613 or 617 (with C or better if completed) |
| SWG | 643 | Advanced Practicum: Planning, Social Work Administration, and Community Practice I | With SWG 644, two consecutive semesters (480 hours) in social work practice in an approved placement related to the student's career goal. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Planning, Administration and Community Practice) major. Pre- or corequisite(s): SWG 623, 685 with C or better if completed |
| SWG | 644 | Advanced Practicum: Planning, Social Work Administration, and Community Practice II | See SWG 643. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 623 with C or better; Prerequisite(s): SWG 623, 685 with C or better, SWG 643 with grade of Y. Pre- or corequisite(s): SWG 681, 682 with C or better if completed |
| SWG | 645 | The Professional Experience III | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: MSW student; SWG 542 with Y grade OR MSW Advanced Standing student; Co-requisite: SWG 610 and SWG 693 |
| SWG | 646 | The Professional Experience IV | 240 hours of supervised social work practice. Provides opportunities to apply classroom learning in the field setting. Y/E grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Standard MSW or MSW Adv Standing student; SWG 645 with Y grade; Co-requisite: SWG 614; SWG 693 |
| SWG | 654 | Introduction to Sexual Abuse | Develops general knowledge and skills for working with persons who have been impacted by sexual abuse. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 655 | Quality of Life | Addresses key elements of a healthy life style contributing to wellness and disease through experiential learning and evidenced-based research. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major or Assessment of Integrative Health Modalities certificate |
| SWG | 656 | Treating the Whole Person | Addresses treating the "whole person's" physical and behavioral health through interviewing, intervention, and treatment within the context of an interdisciplinary model. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major or Assessment of Integrative Health Modalities (certificate) |
| SWG | 657 | Ancient Healing Traditions | Historical development and research of the ancient healing teachings of traditional Chinese medicine, Ayurvedic medicine, homeopathic, naturopathic, and indigenous medicine and how they are used in today's health systems. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y or MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major |
| SWG | 660 | Clinical Supervision in Social Work | Examines and practices the knowledge, skills, and values of becoming a social work supervisor in human service agencies. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWG | 661 | Cognitive Behavior Therapy Across the Lifespan | Knowledge and skills to understand and apply cognitive-behavioral approaches to treatment (CBT), including diagnostic information and empirically supported interventions targeted to individuals, families and groups across the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Cognitive Behavior Therapy Across Lifespan) or 661 |
| SWG | 662 | Social Work Practice With Adolescents | Advanced elective focuses on working with adolescents in a variety of intervention settings (e.g., mental health agencies and schools). | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Social Work Practice With Adolescents) or 662 |
| SWG | 663 | Clinical Trauma Treatment | Explores the assessment and treatment of PTSD in people throughout the lifespan. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Clinical Trauma Treatment) or 663 |
| SWG | 664 | Evidence-Based Approaches to Treatment of Substance Use Disorders | Knowledge and skills to understand substance abuse disorders, including diagnostic information and evidence-based interventions targeted to individuals, families and groups. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 542 with grade of Y OR MSW Social Work (Advanced Direct Practice) or Social Work (Planning, Administration and Community Practice) major; Credit is allowed for only SWG 591 (Treatment Substance Use Disorders) or 664 |
| SWG | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | N | IND | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: Masters or Doctoral Social Work student; SWG 681 or SWG 682 with C or better; Pre/ Co-requisite: SWG 623 with C or better if completed |
| SWG | 681 | Social Work Administration | Administrative skill building and theory application within human service nonprofit social work settings. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: SWG 623 with C or better, SWG 685 with C or better; Co-requisite: SWG 682 |
| SWG | 682 | Community Participation Strategies | Reviews strategies to involve citizens and the consumers of social and human services in community decision-making systems. Participation is viewed as a means to facilitate the empowerment of oppressed peoples. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWG 623 with C or better; SWG 685 with C or better; Co-requisite: SWG 681 |

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| SWG | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 685 | Program Planning in Social Services | Social services planning process; includes needs assessment, goals and objectives, program design, budgeting, management information systems, and program evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWG 542 with grade of Y; SWG 585 with C or better OR MSW Social Work (Advanced Direct Practice) or MSW Social Work (Planning, Administration and Community Practice) major; Corequisite(s): SWG 623 |
| SWG | 686 | Developing Grants and Fund Raising | Identifies potential funding sources, technical and interpersonal/political aspects of proposal development and fund raising. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| SWG | 687 | Public Policy and Advocacy | Covers public policy at the federal level, including administrative, legislative and judicial policy. Students understand how to develop congressional policy and methods to engage in advocacy at the federal level to impact macro social work practice. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only SWG 687 or SWG 591 (Advocacy and Public Policy) |
| SWG | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisites: MSW or MSW Advanced Standing student |
| SWG | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | SEM | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | |
| SWG | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | Pre-requisites: MSW, MSW Adv Standing, or PhD student |
| SWG | 700 | Research Methods | Course on research methods in a specific discipline. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 718 | Qualitative Research Methods | Provides comprehensive qualitative research methods training for doctoral students to complement their quantitative survey research methods knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 718 or 791 (Qualitative Research Methods) |
| SWG | 719 | Quantitative Research Methods | Provides the tools for independently designing and conducting methodologically sound, ethical, quantitative research that advances social work and social welfare knowledge. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student |
| SWG | 720 | Philosophy of Science Issues in Social Work | Critical examination of social science, social work practice, and policy in terms of philosophical assumptions and varying frames of reference. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 721 | Statistics | Logic and application of statistical methods for analyzing social welfare-based data pertaining to social work. Includes ethical issues concerning the appropriate application, interpretation and use of social research, as well as the potential limitations and biases of applications that fail to adequately consider issues of population diversity. Students learn to independently design a research project from start to finish employing statistical analysis of primary data. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: doctoral major |
| SWG | 722 | Pedagogy in Social Work | Prepares doctoral students to teach for the profession of social work. Provides an opportunity for students to develop or enhance their philosophy of teaching, their attitudes toward learning, teaching and students, and the knowledge and skills necessary to teach effectively. Explores teaching to the diverse students present in social work programs, the challenges that teaching presents and the responsibilities that come with social work education. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Doctoral student; Credit is allowed for only SWG 722 or SWG 791 (Pedagogy in Social Work) |
| SWG | 723 | Proposal Development | Provides an opportunity for doctoral students to formulate a dissertation proposal or a research plan for a three-paper option. Provides a forum for presenting ideas, receiving feedback and defending one's proposal. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 723 or 791 (Proposal Development) |
| SWG | 731 | Welfare State | Examines the evolution of the welfare state as a problem of political economy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Doctoral student; Credit is allowed for only SWG 731 or 791 (Welfare State) |
| SWG | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |

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| SWG | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-12 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWG | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Col of Pub Serv & Comm Solutns | School of Social Work | 1 | | |
| SWG | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | IND | Y | Z2 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-15 | | Pre-requisite: Master or Doctor Social Work student. |
| SWU | 171 | Introduction to Social Work | Descriptive and historical perspectives of social problems, social justice issues and society's response to them. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & H | |
| SWU | 180 | Introduction to Lesbian, Gay, Bisexual and Transgender (LGBT) Studies | A historical, socio-cultural introduction to lesbian, gay, bisexual, transgender, transsexual, and intersexed communities and their resilience to challenges and barriers. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Credit is allowed for only SWU 180 or 194 (Introduction to LGBT Studies) |
| SWU | 181 | Economics: A Social Issues Perspective | Introduces economic principles through the lens of contemporary social issues for social work and related fields. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 181 or 194 (Economic and Social Issues in Perspective) |
| SWU | 182 | Social Services Perspective of Government | Explores levels of government and policy practice in advancing social and economic justice and effective social services within the Southwest. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Credit is allowed for only SWU 182 or 194 (AZ/National Government: Social Work Perspective) |
| SWU | 183 | Introductory Ethics: A Social Issues Perspectives | Introductory exploration of ethics from a historical and multicultural perspective viewed through the lens of contemporary social issues. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 183 or 194 (Intro Ethics: Social Issues Perspective) |
| SWU | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 250 | Stress Management Tools I | Helps students develop an understanding and behaviors to create a healthy balance in their lives by studying the bio/psycho/social aspects of wellness. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | |
| SWU | 291 | Social Service Delivery Systems | Federal, state, private not-for-profit and for-profit social service delivery system's purpose, structure, and professional roles. Includes 40 volunteer hours. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: PSY 100, PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU 171 with a C or better if completed |
| SWU | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | SB | |
| SWU | 295 | Foundations of Social Work Practice | Theoretical foundation and skill base for effective culturally competent communication and interviewing with individuals, families, small groups, and larger systems. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB & C | Pre-requisites: PSY 101, SOC 101 or SOC 301; Pre/Co-requisites: SWU171 or 271 and SWU 291 with a C or better if completed |
| SWU | 302 | Human Biology for Social Workers | Overview of human anatomy and physiology, and the reciprocal relationship between physical and social environments. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | |
| SWU | 303 | Micro Human Behavior and the Social Environment | Human behavior in the social environment throughout the life cycle, analyzing theories of human development within an integrative multidimensional framework. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | L or SB | Prerequisite(s): PSY 101; SOC 101 or 301; Pre- or corequisite(s): SWU 171, 291, 295 with C or better if completed, OR Community Advocacy and Social Policy major |
| SWU | 306 | Ethics in Social Services | Focuses on following the NASW Code of Ethics in making ethical decisions in social service settings. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; PHI 101 or 105 or 306 or SWU 183; SWU 291; lower-division (L) course |
| SWU | 310 | Social Work Practice I | Introduces social work methods, emphasizing the following skills: relationship development, cross-cultural interviewing, communication patterns, and case-recording. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 171 or SWU 271 with C or better; SWU 291 with C or better; SWU 295 with C or better; Pre or Co-requisite: SWU 303 (with C or better if completed) |
| SWU | 311 | Integrative Social Work Practice | Social work practice skills emphasizing cross-cultural interviewing, assessment and professional recording. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 171; SWU 291; SWU 295; Corequisite(s): SWU 312; Pre- or corequisite(s): SWU 306 |
| SWU | 312 | Integrative Social Work Practice Skills | Applies social work content from SWU 311 focusing on practice skills and professional behavior. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 171; SWU 291; SWU 295; Corequisite(s): SWU 311; Pre- or corequisite(s): SWU 306 |
| SWU | 320 | Research Methods in Social Work | Applies scientific principles to field practice, problem formulation, intervention procedures, and impact assessment in social work. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre- or corequisite(s): SWU 310 with C or better if completed, or Community Advocacy and Social Policy major |
| SWU | 321 | Statistics for Social Workers | Teaches social work students how to use and interpret descriptive and inferential statistics in social work practice. May be repeated for credit. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | CS | Pre-requisites: MAT 142 or an MA general studies course |

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| SWU | 332 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Community Advocacy and Social Policy major; POS 110 or POS 310 or SWU 182 |
| SWU | 340 | Macro Human Behavior and the Social Environment | Human behavior in the social environment, focusing on groups, organizations and communities and examining theoretical perspectives in a macro context | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | SB | Prerequisite(s): SWU 303 with C or better; Pre- or corequisite(s): SWU 310 with C or better if completed OR Community Advocacy and Social Policy major |
| SWU | 349 | Stress Management Tools II | Developing mindful strategies toward managing stress, developing instinct awareness; healthy decisions in nutrition, relationship with self, others and creating a personal carbon footprint. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Credit is allowed for only SWU 349 or SWU 294 (Stress Management Tools II) |
| SWU | 350 | Whole Person Health Across the Lifespan | Development of mindful strategies toward managing stress and identification, implementation and integration of skills and knowledge for well-being across the lifespan. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| SWU | 351 | Sustainable Living, Mindful Eating | Addresses issues related to foods we eat, how we eat, and impacts of choices on health, the environment, locally and globally. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ENG 102, 105, or 108 with C or better |
| SWU | 374 | Diversity and Oppression in a Social Work Context | Issues of social inequality related to race, ethnicity, gender, sexual orientation, and disability. Emphasizes populations of the Southwest. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre- or corequisite(s): SWU 310 with C or better if completed, or Community Advocacy and Social Policy major |
| SWU | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | Pre-requisite: Master of Social Work student |
| SWU | 410 | Social Work Practice II | Knowledge and skills in social work practice with individuals and families. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 310 with C or better; PHI 101 (or PHI 105, 306 or SWU 183); BSW Social Work major. Corequisite(s): SWU 412, 413 |
| SWU | 411 | Social Work Practice III | Knowledge and skills in social work practice with groups, communities, and organizations. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: SWU 410, 412, or 413 with C or better or Co-requisites: Social Work student with SWU 414; SWU 415 |
| SWU | 412 | Field Instruction I | 16 hours a week of supervised practice in an approved placement. "Y/E" grade only. | N | PRA | N | YGB | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 413 |
| SWU | 413 | Field Instruction Seminar | Field-focused seminar, including practice evaluation. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 310 with C or better; Co-requisite: SWU 410; SWU 412 |
| SWU | 414 | Field Instruction II | 16 hours a week of supervised practice in an approved placement. Y/E grade only. | N | PRA | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisites: Social Work student; SWU 410, SWU 412 or SWU 413 with C or better Co-requisites: SWU 411 and SWU 415 |
| SWU | 415 | Integrative Field Seminar | Field-focused seminar to help students integrate practice and theory. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): Social Work student; SWU 410, SWU 412 or SWU 413 with C or better; Corequisite(s): SWU 411 and SWU 414 |
| SWU | 432 | Social Policy and Services | Contemporary social, political, and economic issues. Special emphasis on poverty and inequality in the Southwest. Analysis and development of social welfare policies and programs. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): ECN 211 (or SWU 181); POS 110 (or POS 310 or SWU 182); SWU 310 with C or better; Social Work major. Corequisite(s): SWU 410, 412, 413 |
| SWU | 442 | Introduction to Practice with Children and Families in Child Welfare | Focuses on the characteristics, strengths, and service needs of families and children in the Child Welfare System. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Social Work student; SWU 410 with C or better; SWU 412 with C or better; SWU 413 with C or better |
| SWU | 450 | Mastering Mindfulness | Facilitates mastering mindfulness practice. Students teach a lesson and develop a training proposal that will be implemented and evaluated. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre- or corequisite(s): SWU 350; SWU 351 |
| SWU | 456 | Immigrants and Refugees | Provides basic conceptual approach to understanding immigrant and refugee issues and how these factors influence social work practice with immigrant and refugee populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 456, 498 (Immigrants & Refugees) or 556 |
| SWU | 457 | Southwest Borderland Immigration Issues | Reviews immigration history, trends, policies, and legislation. Focuses on immigrant experience from economic, educational, social, political, familial perspectives in Southwestern U.S. | N | SEM | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Credit is allowed for only SWG 557 or SWU 457 |
| SWU | 458 | Behavioral Health Services | Behavioral health conditions; their impact on the individual, family and community; and historical and contemporary service models. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 458, 498 (Behavioral Health Services) or 558 |
| SWU | 459 | Spirituality and the Helping Professions | Provides a framework for spiritually and culturally competent practice with diverse populations. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 459, 494 (Spirituality and the Helping Professions), 498 (Spirituality & Helping Profession) or 559 |
| SWU | 460 | Legal Issues in Social Work | How the law relates to social work practice, administration and policy. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Pre-requisite: Junior standing; Credit is allowed for only SWU 460, 498 (Legal Issues in Social Work) or 560 |
| SWU | 461 | Lesbian, Gay, Bisexual, Transgender, and Queer Issues | Historical, socio-cultural introduction to lesbian, gay, bisexual and transgender communities and their resilience to challenges and barriers. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: Junior standing; Credit is allowed for only SWU 461, 498 (Lesbian/Gay Issues) or 561 |
| SWU | 462 | Global Social Welfare | Analyzes social work's response to international social issues and human need from the perspectives of globalization, development and human rights. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): junior standing; Credit is allowed for only SWG 562 or SWU 462 or SWU 498 (International Social Work) |
| SWU | 474 | Ethnic/Cultural Variables in Social Work | Basic conceptual approach to understanding ethnic and cultural variables of southwestern ethnic minorities and how these factors influence social work practice. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | C | Pre-requisite: SWU 310 with C or better |
| SWU | 488 | Advocacy Strategies | Comprehensive advocacy approach that spans administrative, legislative and community strategies. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Social Work | 3 | | Prerequisite(s): SWU 320; SWU 332; SWU 340; SWU 374; senior standing |

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| SWU | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | | Prerequisite(s): Barrett Honors student |
| SWU | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | IND | N | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-6 | L | Prerequisite(s): Barrett Honors student |
| SWU | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-4 | | |
| SWU | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Social Work | 1-7 | | |
| SWU | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Social Work | 1-3 | | Pre-requisite: Bachelor of Social Work student |
| TBX | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Dean, Thunderbird School of Global Management | 0.33-12 | | Prerequisite(s): Thunderbird Teach-Out students |
| TCL | 101 | Introduction to Transborder Chicana/o and Latina/o Studies | Historical and contemporary issues in Chicana/o and Latina/o communities; focuses on the diverse economic, sociological, cultural, and political status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 111 | Introduction to Transborder Chicana/o and Latina/o Culture | Interdisciplinary analysis of customs, values, belief systems, and cultural symbols; special attention is given to cultural continuity and change. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 201 | Transborder Society and Culture I: Interdisciplinary Approaches | Intensive overview of Mexican origin and Latina/o populations through various sociological, historical, anthropological, economic, political, cultural, literary, and analytical lenses. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 202 | Transborder Society and Culture II: Contemporary Issues | Examines contemporary transborder belief systems, ideologies of health, gender, familial structures, and community development within a transnational context. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 210 | Introduction to Ethnic Studies in the U.S. | Covers diversity of experiences and relations among racial and ethnic groups in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only AFR 212 (or AFS 210) or APA 210 or JUS 210 or TCL 210 |
| TCL | 211 | Transborder Chicana/o and Latina/o Poetry | Writing seminar on Chicana and Chicano poetics and intensive creative writing workshop. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 220 | Transborder Latina/o Expressive Culture | Examines media, literature, performance, and visual art grounded in the historical experiences of transborder Latina/o communities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | Prerequisite(s): ENG 101, ENG 105, or ENG 107 with C or better |
| TCL | 230 | The Expressive Culture of Latin America and the Caribbean: A Transborder Perspective | Interdisciplinary social science introduction to various forms of cultural expressions found throughout Latin America and the Caribbean region and in Latina/o communities within the United States. Uses a transborder perspective to examine how migration, race, ethnicity, gender, power, history and identity shape and influence different aspects of Latina/o culture and identity. Focuses on the study of a wide array of expressive practices including music, dance, verbal arts, myths and folktales, festivals, sports and food in Mexico, the Spanish Caribbean and their counterpart Latina/o communities in the United States. Class lectures and readings introduce basic concepts such as ethnography, ethno-musicology, culture, representation and globalization. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU or SB) & C | Credit is allowed for only ASB 220 or TCL 230 |
| TCL | 270 | Race and Gender in American Film | Explores how Hollywood shapes perceptions of race and gender in American society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Credit is allowed for only FMS 270 or TCL 270 |
| TCL | 275 | Culture, Language and Learning | Examines the dynamic and complex interplay of language, culture and learning within and across individuals, groups, institutions and cultures in diverse multicultural, multilingual and transborder contexts. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Credit is allowed for only ASB 275 or TCL 275 |
| TCL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 303 | Transborder Theory | Studies historical, cultural, and economic theories contributing to understanding the emergence of Mexican and Latina/o origin populations in the Americas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 304 | Transborder Research Methods | Emphasizes critical skills: quantitative/qualitative, spatial, archival, and reflexive methodologies, including ethnographic, biographical, historical, and mapping. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 305 | Transborder Practicum and Field Research. | Field work with faculty incorporating practical experience while honing research skills and ability. | N | PRA | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre or Co-requisites: TCL 303 and TCL 304 with C or better if completed |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TCL | 310 | Transborder Chicano/a and Latino/a Folklore of Southwest North America | Analyzes Chicana and Chicano folk beliefs, traditions, and practices. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 314 | Transborder Regional Immigration and Economy | Historical/contemporary overview of Mexican immigration into and within the U.S.; factors affecting population movement, settlement patterns, and migrants' incorporation into society. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & H & C | |
| TCL | 315 | Chicana/o and Latina/o Family Structures | Traditional and changing family relationships; emphasis on gender and intergenerational relations and impact of modern society on traditional family values. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | |
| TCL | 321 | Transborder Community Development and Health | Emphasizes core concepts and practices relevant to regional community development and health, including demographic health indicators, individual, and community models. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 323 | Latino Health Issues | Health issues among Chicanos and other U.S. Latinos; interplay among political economy, health, family, culture, and community. | N | LEL | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 4 | SB & C | |
| TCL | 326 | Health of Chicanas and Latinas | Examines gender, ethnicity, and health; critical issues affecting health status of Chicanas and Latinas. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 327 | Health and Migration | Focuses on health status among various immigrants; health trajectories following migrations, adaptive behaviors, health practices, and the role of policy. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: ENG 102, 105, or 108 with C or better |
| TCL | 328 | U.S. Latino Religion and Culture | U.S. Latino and Latin American religious history with special attention to what have become Hispanic mestizo hybrid cultures. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: Minimum 24 earned hours; ENG 102, 105, or 108 with C or better; Credit allowed for only REL 326 or TCL 328 |
| TCL | 331 | Mexican American History to 1900 | Mexican American history from pre-Hispanic origins to frontier journeys north through 19th-century life in the U.S. Southwest. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 331 |
| TCL | 332 | Mexican American History Since 1900 | Traces the formation of Mexican American communities across the rural and urban U.S. and examines 20th-century immigration from Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & H & C | Pre-requisite: ENG 102, 105 or 108 with a C or better; Minimum 30 hours; Credit is allowed for only HST or TCL 332 |
| TCL | 335 | Historical Studies in Race, Crime, and the Law | Studies the historical relationship between the criminal justice system in the United States and a segment of society that has traditionally faced official and unofficial discrimination: American racial minorities. Focuses on the experiences of Mexican Americans and African Americans with the criminal justice system. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: ENG 101 & ENG 102 with C or better. Credit is allowed for only AFR 335, HST 323 or TCL 335 |
| TCL | 340 | Chicana/o and Latina/o Politics and Policy | Historical/contemporary analysis of Chicana and Chicano political ideologies, attitudes, strategies, and movements; relations with governmental agencies; and public policy issues. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | |
| TCL | 341 | Policy Issues in Chicana/o and Latina/o Urban Settings | Historical, demographic, and sociological overview of the status of Chicanas and Chicanos in urban settings as well as the public policy relevance. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 342 | Social Demographics of Latino Populations | Provides an introduction to social demography of Latinos in the U.S. from the 19th century to the present. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | |
| TCL | 350 | Transborder Mexican and Chicano/a Artistic Production | Overview of Mexican and Mexican American artistic production from colonial times to present; emphasis on religious and folk art. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C & G | |
| TCL | 351 | Transborder Chicano/a and Latino/a Art | Intensive analysis of contemporary Chicana and Chicano art movement as appraised within the context of contemporary American art and the art of Mexico. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 352 | Chicana/o Film | Explores how Chicano and Chicana filmmakers have interpreted the Chicano experience through the medium of film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | |
| TCL | 353 | Race, Space and the Production of Inequality | Explores how the relationship between race and space has been important to the development of broad patterns of social inequality in the United States. Through a variety of readings, films and other material, examines how ideas of race and space have been important to the making and maintenance of national boundaries, citizenship, regional histories and spatial typologies such as border, ghetto, suburb and prison. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): APA 200 or 210; minimum 45 hours; Credit is allowed for only AFR 352 (or AFS 352) or APA 352 or JUS 353 or TCL 353 or APA 394 (Race, Space and the Production of Inequality) |
| TCL | 360 | Inequality and Diversity in Education | Advanced exploration of various dimensions of diversity in relation to educational systems and outcomes. Through sociological and psychological research, case studies and films, students examine how educational inequality is created and reproduced through individual actions and institutional constraints. Also considers the connection between schooling and human rights and ways in which educational inequality may be addressed. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Prerequisite(s): APA 200, AFR 212 (or AFS 210), APA 210, CDE 232, JUS 210, TCL 210 or minimum 30 hours; Credit allowed for only AFR 350 (or AFS 350), APA 350, CDE 350, JUS 365, SOC 350, TCL 360 or AFS/APA/CED/TCL 394 (Inequality & Diversity in Education) |
| TCL | 363 | Transborder Mexican and Chicano/a Literature of Southwest North America | Development of Chicana and Chicano literature; study of genres and themes; attention to literary antecedents. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only ENG 363 or TCL 363 |
| TCL | 364 | Transborder Mexican Literature Before 1917 | Offers a historical panoramic view of the political, intellectual, social, economic, and artistic development of the Spanish-speaking people of the Southwest. May be taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L | Prerequisite(s): minimum 45 hours |
| TCL | 370 | Signs of Aliens: Semiotics of Film and Popular Culture | Introduces semiotics and cultural studies; looks at various meanings ascribed to the sign of the alien. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | Credit is allowed for only FMS 370 or TCL 370 |

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|---------|-------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|---------------|---------------------------|-------------------------------|-------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCL | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |
| TCL | 378 | McGlobalization: Migration, Mass Media and McDonald's | Explores the impact of globalization on local societies and cultures by focusing on the international migration of peoples, the global expansion of capitalism and global mass media and popular culture. Examines both the socioeconomic causes and consequences of globalization, as well as how local peoples around the world have been affected by, participated in and resisted the forces of globalization. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & C | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 378 or TCL 378 |
| TCL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 410 | Race, Medicine, and the Body | Explores how body and embodiment and race and ethnicity are constructed within and by biomedical sciences and technology development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L | Prerequisite(s): ENG 101, 105 or 107 with C or better; minimum 45 hours |
| TCL | 422 | U.S.-Mexico Border Health | Focuses on identifying health issues affecting Latino/Mexican families in the U.S.-Mexico borderlands using basic epidemiological techniques to analyze regional data. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Pre-requisites: TCL 321 with C or better |
| TCL | 424 | Theory and Practice of Community Development and Health | Foundations of methodology of community mapping and establishment of community diagnosis, media literacy and advocacy applications for community-based public health. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB | Pre-requisites: TCL 321 with C or better |
| TCL | 443 | Political Ecology of the Border | Using a political ecology approach, focuses on the creation of border communities of Southwest North America. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | Prerequisite(s): minimum 45 hours; Credit is allowed for only ASB 463 or SOS 463 or TCL 443 |
| TCL | 444 | The Ethnography of Mexico and the Borderlands | Focuses on the internal characteristics of a selected Mexican rural border towns and villages; analyzes the dynamics of development. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | SB & G | Pre-requisites: Minimum 45 earned hours; Credit is allowed for only ASB 464, TCL 444 or 598 (The Ethnography of Mexico and the Borderlands) |
| TCL | 445 | Transborder Latin American Short Story | Studies the modern Latin American short story, with primary focus on the development of its literary and cultural tradition. Taught in Spanish. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L or HU | Prerequisite(s): SPA 202 (or SPA 204); minimum 45 hours |
| TCL | 446 | Comparative Bilingual Latina/o Poetics | Comparative study of contemporary bilingual Latina/o poetry. Focuses on two specific U.S. ethnic minority groups--Mexican- (or Chicanos) and Puerto Rican-Americans (or nuyoricans)--who have long and strong literary traditions of bilingual poetry. The significant feature of both bodies of poetry is the interactive mixture of their base languages: Spanish and English. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only TCL 446 or 598 (Comparative Bilingual Latina/o Poetics) |
| TCL | 447 | Gender, Culture, and Development | In-depth analysis of gender roles related to health, family, work, education and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or SB) & G | Prerequisite(s): WST 100 or 300 or minimum 45 hours; Credit is allowed for only SGS 454 or SOS 447 or TCL 447 or WST 447 or TCL 598 (Gender, Culture & Development) |
| TCL | 448 | Teaching Chicana and Chicano Studies in the Schools | Approaches/techniques for infusion of transborder studies content into elementary and secondary curriculum; designed for teachers who work with Mexican and Latino origin students. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): minimum 45 hours |
| TCL | 464 | Latina/o Literature | Development of Latina/o literature. Study of genres and themes; attention to literary antecedents of the new U.S.-based Latina literature. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | Credit is allowed for only ENG 458, FMS 464 or TCL 464 |
| TCL | 465 | Chicana/o and Latina/o History on Film | Explore history on film; the processes, developing critical perspectives about historiography, and film in relation to U.S.-Mexican borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102, 105 or ENG 108 with C or better. Credit is allowed for only FMS or TCL 465 |
| TCL | 466 | Constructing the Border on Film | Explores the U.S.-Mexico border on film, examining how border images have been constructed and shaped over time. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | C | Credit is allowed for only FMS or TCL 466 |
| TCL | 470 | Race, Sex, and Identity Online | Relying on critical and cultural theory, addresses the relationship between race, sex, and social identity online. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only FMS or TCL 470 |
| TCL | 471 | Latinos In Hollywood | Studies representations of Latinos in film; stereotyping, politics of metaphor, allegory, star discourse, self-representation, resistance, and independent film. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | |
| TCL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | |
| TCL | 485 | Chicana and Latina Writers | Critical reading of Mexican American women authors; emphasis on contemporary (post-1970) poetry, novels, short stories, and essays. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | (L or HU) & C | |
| TCL | 488 | Border Global Narratives | Studies four general and different border areas through literature. Through literary-cultural texts, looks into peoples' experiences of migration to and from the homelands of Mexico, Haiti, the Dominican Republic, Cuba, and the Puerto Rican isle to the U.S. These experiences are never uni-directional but are characterized by constant back-and-forth movement. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | L & C | Credit is allowed for only TCL 488 or 598 (Border Global Narratives) |
| TCL | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 credit hours; Credit is allowed for only TCL or WST 490 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TCL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| TCL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TCL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | |
| TCL | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-7 | | Prerequisite(s): Transborder Chicana/o and Latina/o Studies (Media and Expressive Culture or Transborder Community Development and Health or U.S. and Mexican Regional Immigration Policy and Economy) major; minimum 56 hours |
| TCL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | N | LEC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-3 | | |
| TCL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | Pre-requisite: Maximum 25 hours; Credit is allowed for only CRD, PRM or TDM 191 |
| TDM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 205 | Introduction to Travel and Tourism | Examines the components of the travel and tourism industry at the state, national, and global levels. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 210 | Community Services and Professions | Introduces the system of public, nonprofit, and private sector resources and services comprising contemporary communities. Organized into three modular units with emphasis on the delivery of services in the parks and recreation, tourism, and nonprofit professions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: NLM 160 or PRM 120 (with C or better if completed); Credit is allowed for only CRD or NLM or PRM or TDM 210 |
| TDM | 225 | Introduction to Resort and Hotel Management | Introduces local, national and international lodging and food service industries. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 301 | Sustainable Communities | Analyzes community as concept and as an organizing system for promoting sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre/Co-requisite: PRM 120 or NLM 160 with C or better if completed; Credit is allowed for only CRD, NLM, PRM, SOS or TDM 301 |
| TDM | 302 | Inclusive Community Development | Examines the characteristics of diverse populations across the lifespan to effectively develop inclusive community programs and services. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | C | Pre-requisites: ENG 102; MAT 142; NLM 160 (or PRM 120) with a C or better; 2.50 GPA; 45 earned hours; Credit is allowed for only CRD, NLM, PRM or TDM 302 |
| TDM | 345 | Meeting and Convention Planning | Basic aspects and skills in planning meetings and conventions. Industry and market overview of certified meeting planners. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 350 | Tourism, Recreation and Sports Marketing | Critical examination of marketing principles in leisure and related industries in diverse settings, including local, national, and international. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 210 or CSM 201 or TDM 205; minimum 45 hours. Credit is allowed for only CSM 350 or PRM 350 or TDM 350 |
| TDM | 372 | Tourism Planning | Applies economic and regional development concepts and theories to destination product development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | L | Pre-requisites: Tourism Development & Mgmt or Recreation (Tourism) students; Minimum 2.50 gpa; Minimum 45 hours; TDM 205 or RTM 373 with C or better; ENG 102 with C or better; MAT 142 or higher with C or better |

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| TDM | 386 | Convention Sales and Management | The role of convention and visitors bureaus or resort managers, including economic impacts of markets, structure, governance, membership, and advertising. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | |
| TDM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 401 | Tourism Management | Basic principles of administration and their application in successful administrative situations. Analyzes administrative function, structure, and policies. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): CRD 201 or PRM 210 or TDM 210 with C or better; CRD 301 or PRM 301 or TDM 301 or TDM 301 with C or better; PRM 303 or TDM 372 with C or better |
| TDM | 402 | Assessment and Evaluation of Community Services | Introduces applied leisure research with emphasis on program evaluation, research design, data collection techniques, and data analysis. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre- or corequisite(s): CSM 401, NLM 410, PRM 401, or TDM 401 with C or better if completed; Credit is allowed for only CSM 402 or NLM 402 or PRM 402 or TDM 402 |
| TDM | 403 | Leadership and Professional Development | Examines leadership theory and strategies, current professional issues, and refinement of professional philosophy and competencies that enable transition from student to professional. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: NLM, PRM or TDM 210 with C or better; NLM, PRM or TDM 301 with C or better; Senior standing; 2.50 GPA. Credit is allowed for only CRD, NLM, PRM or TDM 403 |
| TDM | 415 | Tourism Transportation Systems | Examines the role of various modes of transportation in domestic and international tourism development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 or RTM 373 with C or better |
| TDM | 448 | Heritage and Cultural Tourism | Provides a solid conceptual understanding of the issues, problems, and management implications associated with heritage and cultural tourism. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: TDM 205 with C or better; Credit is allowed for only TDM 448 or CRD 598 Heritage and Cultural Tourism) |
| TDM | 458 | International Tourism | Global examination of international tourism and its significance as a vehicle for social and economic development. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | G | |
| TDM | 463 | Senior Internship | Supervised guided experience in selected agencies. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 6-12 | | Prerequisite(s) with C or better: CRD 403 or PRM 413; CSM 402 or NLM 402 or PRM 402 or TDM 402. Credit is allowed for only CSM 463 or NLM 463 or PRM 463 or TDM 463 |
| TDM | 475 | Entrepreneurial Recreation and Tourism | Explores basic business principles and innovative processes involved in starting a small business in the commercial recreation and tourism industry. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Minimum 60 hours; Credit is allowed for only PRM or TDM 475 |
| TDM | 480 | Sustainable Tourism | Tourism has a multitude of impacts, both positive and negative, on people's lives and on the environment. Critically analyzes the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: PRM 120 or TDM 205 or 60 minimum hours |
| TDM | 481 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Defines sustainable development, explains the importance of sustainable food systems, recognizes the relationship between local food systems and global food challenges. Connects the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; defines leakage in reference to tourism and food. Creates and applies sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: Junior standing; Minimum 60 hours |
| TDM | 482 | Sustainable Revenue Management | Introduces the fundamental economic principles that underlie revenue management and the practical application of new analytical technological services in the hotel and resort industry. Uses experienced revenue managers from local resorts and hotels as regular guest speakers and IdeaS system (a revenue management analytics subsidiary of SAS). | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisites: MAT 142 or higher; Minimum 72 hours |
| TDM | 483 | Sports Tourism | Examines the relationship between sports and tourism, and the role of recreation and amateur sports as an economic and community development strategy. Also considers the motives, behaviors and experiences of sport tourists; the impacts of sport tourism; and trends in sports tourism. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): Minimum 45 hours. Credit is allowed for only CSM 483 or TDM 483 |
| TDM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Pre-requisites: TDM 205 or NLM 220 or PRM 210; 72 minimum hours; 2.50 GPA or higher; Non SCRd majors |
| TDM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |

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| TDM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TDM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | |
| TDM | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-6 | | Prerequisite(s): Barrett Honors student |
| TDM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-7 | | |
| TDM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-3 | | |
| TDM | 520 | Sustainable Thinking in Tourism | First in a series of two courses introducing students to the basic concepts of sustainability and their application and implications for tourism. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 521 | Sustainable Thinking in Tourism II | Second in a series of two courses focusing on how to measure, assess, and plan for sustainability in the tourism industry. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Pre-requisite: TDM 520 with C or better |
| TDM | 530 | Sustainable Tourism Destination Planning and Management I | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 531 | Sustainable Tourism Destination Planning and Management II | Applies sustainable economic and regional development concepts and theories to destination planning and management. Students learn the fundamentals of sustainable planning, including stakeholder involvement and meeting community needs. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): TDM 530 |
| TDM | 540 | Sustainable Food Management in Tourism | Focuses on the fundamentals of sustainability, sustainable food systems, relationships between food and tourism, and the applications of sustainable food practices in different types of global tourism. Students learn to define sustainable development; explain the importance of sustainable food systems, recognize the relationship between local food systems and global food challenges; connect the challenges of creating and maintaining sustainable food systems with the needs of tourists and tourism destinations; define leakage in reference to tourism and food; and create and apply sustainability assessment criteria to food systems in a variety of different tourism spaces. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 550 | Managing the Sustainable Tourism Business | Through case study analysis, students learn how sustainability impacts business operations, how successful sustainable businesses identify and assess alternative resource management techniques, and evaluate operational models for embedding sustainability practices into their business models. | N | LEC | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s) TDM 570; Credit is allowed for only TDM 550 or CRD 598 (Managing the Sustainable Tourism Business) |
| TDM | 561 | Best Practices Workshop Preparation | First in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A destination or business is identified to be used as a case study. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre/co-requisite: TDM 521 with C or better |
| TDM | 562 | Best Practices Workshop Presentation | Second in a series of two courses investigating and sharing best practices in sustainable tourism. Provides an overview of best practices and innovative actions in tourism. A presentation of a best practices case study is conducted for the class. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1 | | Pre-requisite: TDM 561 with C or better |
| TDM | 570 | Sustainable Tourism | Critically examines the environmental, economic, and socio-cultural aspects of tourism development, and strategies to attain balance among these three dimensions to guarantee its long-term sustainability. | N | SEM | N | GNA | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TDM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TDM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Community Resources and Development | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 101 | The Teachers College Experience | Introduces all new first-time ASU students to the unique elements, culture, challenges, and opportunities of their university. Mary Lou Fulton Teachers College sections relate specifically to future educators. Covers several core college success topics. | N | SEM | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | Pre-requisite: Mary Lou Fulton Teachers College Freshmen student |
| TEL | 111 | Exploration of Education | Education as an instrument in the development of the individual and society and its significance as an American Institution. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 200 | Social Embeddedness of Educational Endeavors | Serves as a pathway toward self discovery and professional identity. Course readings, reflections and self assessments help students develop personal and professional goals and goal-setting strategies. Course assignments provide students with a greater level of understanding regarding the reciprocal influences among community and culture and the student's life experiences. Students have an opportunity to clearly define themselves and share topics they are passionate about, as well as locate how they might fit into and contribute to their community. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | |
| TEL | 212 | Understanding the Culturally Diverse Child | Surveys cultural and linguistic diversity in American education, including education equity, pluralism, learning styles, and roles of schools in a multiethnic society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Credit is allowed for only MCE 230 or TEL 212 |
| TEL | 215 | Introduction to Child and Adolescent Development | Emphasizes the cognitive, social-emotional, and physical domains of child and adolescent development. From a knowledge base of theory, research, and current issues, students apply learning to developmentally appropriate principles and practices that guide relationships and learning experiences for all children. Uses available technologies; emphasizes the complex ecosystem of culture, ethnicity, family, and school. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | SB | |
| TEL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 300 | Community, Family, and Education | Addresses education in a community and family context. Analyzes education and identifies education-focused community challenges in a broad variety of settings and across multiple times and places. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200 |
| TEL | 311 | Instruction and Management in the Inclusive Classroom | Planning and delivering instruction, organizing and managing classrooms, and making adaptations for English language learners and students with special needs. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 313 | Educational Technology in the K-12 Curriculum | Focuses on using technology in an education setting and addresses the integration of technology in curricular areas for all students. Students receive a broad-based introduction to using and integrating technology into many different educational settings. | N | LEL | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 56 hours |
| TEL | 314 | Classroom Assessment | Assessment and evaluation of student learning; emphasizes integration and adaptation of curriculum, instruction, and evaluation of all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 315 | Child and Adolescent Development | Physical, cognitive, social, and emotional development during childhood and adolescence; developmentally appropriate principles and practices to facilitate development for all students. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L or SB | |
| TEL | 316 | Teaching, Imagination, and Creativity | Engages students in critical thinking and the complex terrain of aesthetic theory and intellectual, academic work and teaching practice. Students apply aesthetic consciousness teaching by teachers developing imagination, creativity, and intuition as tools to use every day in their classrooms. Emphasis on how teachers can integrate the arts into the curriculum, use the arts to support academic content, and develop aesthetic consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. The arts will also be studied as multi-cultural and socio-cultural phenomena, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society.consciousness as a way of becoming attuned to the teaching environment as well as to learners' diverse cultures, talents, and needs. Also studies the arts as multicultural and sociocultural phenomena in support of these ends, aiding teachers to become consciously attuned to the culturally diverse learner within the larger society. | N | LEC | N | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisites: Education majors; Minimum junior standing |

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| TEL | 320 | Introduction to Gifted Education | Overview of a variety of issues related to gifted students from preschool through high school. Provides background in order to create an optimal experience for students, parents and teachers when working with gifted students. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| TEL | 400 | Innovation in Educational Endeavors | Pursues innovative solutions to social problems with the courage and ability to impact change in individuals, communities and organizations. Reviews community problems, challenges or areas of improvement; learns underlying principles of social enterprise; and develops innovative methods that empower individuals and support educational initiatives. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200, 300 |
| TEL | 404 | Current Issues in Education and Policy Reform in the United States | Specialized topics related to current issues in education with a focus on education reform efforts from the late 20th century into the 21st century. Explores current reform efforts in education as part of the larger public policy agenda in the United States, analyzing how external influences shape present education systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-reqs for TEL 404 |
| TEL | 405 | History of Education and Policy Reform in the United States | Specialized topics in education history with a focus on education reform efforts from pre-Revolutionary War time to the end of the 20th century. Explores the past reform efforts in education as part of what was happening historically in the United States, analyzing how those efforts have shaped the present education systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TEL 405 or TEL 494 (History of Education & Policy Reform in the US) |
| TEL | 410 | Leadership and Advocacy in Educational Endeavors | Educators who take an active stance through advocacy and leadership are well-equipped to create societal change. Students learn about styles of leadership that are fitting for this need, study advocacy techniques, then position themselves as advocates and leaders as they create a plan, with goals, to address an identified community problem, challenge or area of improvement. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): TEL 200; 300; 400 |
| TEL | 420 | Curriculum Strategies for Gifted Learners | Overview of a variety of ways in which to create and adapt curriculum for gifted students from preschool through high school. Provides a broad range of resources for classroom teachers to use in order to help gifted students work to their full potential in a heterogeneously grouped classroom. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): Admission to Professional Teacher Preparation Program |
| TEL | 430 | Learning Outside of School | Studies and methods from a variety of nonschool environments for learning and development. Teaches knowledge and skills such as methods of identifying and evaluating free-choice learning that occurs through museum going, hobbies, family learning, media, community programs, sports, public health campaigns, and more. Covers career opportunities for educators in key creative environments besides classrooms. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 430 or 494 (Learning Outside of School) |
| TEL | 431 | Learning in Workplaces | School isn't the only place where people learn! Once you get a job, most of what you learn will occur as you do your job, and that kind of learning is crucial to the development of competence and expertise. Surprisingly, seventy to eighty percent of this important learning takes place outside of formal training. Studying learning in workplaces illuminates how learning happens universally, and helps teachers and trainers design effective educational programs. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: Minimum 45 hours; Credit is allowed for only TEL 431 or 494 (Learning in Workplaces) |
| TEL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1 | | |
| TEL | 489 | Undergraduate Projects and Research in Education | Topics include history of educational research, literature reviews, research methodology, resources, individual project ideas and the creation of a research prospectus. Students may also work in teams to complete theses or projects if their interests intersect. Open to all students; however, Honors and Scholar's Academy students will be planning and/or implementing theses or creative projects. | N | LEC | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TEL 489 or TEL 494 (Undergrad Projects & Research in ED) |
| TEL | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | | Prerequisite(s): Barrett Honors student |
| TEL | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |

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| TEL | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-3 | | |
| TEL | 501 | Introduction to Research and Evaluation in Education | Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasizes locating and critically interpreting published research. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only COE 501 or ECD 503 or PPE 501 or SPE 501 or TEL 501 |
| TEL | 504 | Learning and Instruction | Introduces psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 505 | American Education System | Political, social, historical, and philosophical analyses of American education at all levels. Examines primary sources, legal findings, and case studies. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | N | LEC | N | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 607 | Critical Social Theory and Education | Seminar exploring education through the lens of critical social theory originating in the Frankfurt School. Marxian theory is updated to confront current situations through the ideas of alienation, base and superstructure, hegemony, ideology, and culture theory as well as a vision of human consciousness. Includes Pierre Bourdieu's theory of habitus, social or cultural capital, and field. Studies various critical education scholars as applications of critical social theory. Examines critiques of critical theory. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Credit is allowed for only DCI 691 (Critical Social Theory) or TEL 607 |
| TEL | 683 | Field Work | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | |
| TEL | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | GRD | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 701 | Assessment Policies, Issues, and Practices | Critical thinking about assessment data and other information sources to make inferences, judgments, and predictions about reality in schools. | N | LEL | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 702 | Dynamic Contexts of Education | Explores current ethical issues influencing leadership decisions with a focus on real problems in the educational setting. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 703 | Innovation in Teaching and Learning | Development and psychological processes of human cognition, motivation, and performance applied to cognitively diverse, English language learners, adult professional development. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 704 | Leading Change in Educational Organizations | Develops understanding of dynamic and systemic nature of organizations, with emphasis on leadership for building organizational capacity and learning | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 706 | Introduction to Doctoral Studies | Prepares doctoral students for success, focusing on balance and identity, communities of practice, leadership and innovation, action research, and organization systems. | N | LEC | N | GNA | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Pre-requisites: Leadership and Innovation EdD major; Credit is allowed for only TEL 598 (Introduction to Doctoral Studies) or 706 |

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| TEL | 711 | Strategies for Inquiry | Develops knowledge and skills for research and program evaluation that fosters innovation in education that leads to improved student learning. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 712 | Mixed Methods of Inquiry | Methods for combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | SEM | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 713 | Applied Mixed Methods of Inquiry | Data collection, analysis, interpretation in studies combining qualitative and quantitative inquiry in action research, evaluation, and data-based decision making. | N | LEC | N | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 793 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | N | LEC | Y | OPT | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 795 | Continuing Registration | | N | LEC | Y | Z3 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEL | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | MaryLouFulton Teachers College | Educational Leadership & Innovation, Division | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 100 | Seminar in Entrepreneurship | Exposes students to careers in entrepreneurship by inviting diverse entrepreneurs to discuss their businesses and backgrounds and share their stories on starting and growing their ventures. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Credit is allowed for only TEM 100, TEM 194 (Entrepreneurship) or OMT 191 (Entrepreneurship) |
| TEM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion/interaction. Strongly recommended for first-year students. Must have taken 25 or fewer semester hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 200 | My Technology Venture | Introduces the concept of entrepreneurship through venture practice and self-reflection to help students understand their potential roles in a technology-driven marketplace. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110; Credit is allowed for only TEM 200, 294 (My Technology Venture) or TMC 294 (My Technology Venture) |
| TEM | 230 | Creativity and Business Innovation | Introduces concepts, models and techniques of creativity and innovation. Exposes processes related to developing creative skills and habits with an emphasis on problem solving and design. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Minimum sophomore standing; Credit is allowed for only TEM 230, TEM 394 (Technology Entrepreneurship) or TMC 394 (Technology Entrepreneurship) |
| TEM | 250 | Design Methodology | Outlines product design method and provides opportunity to apply it to a design project including identifying needs, setting target specifications, generating and selecting concepts, prototyping and testing. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 250 or OMT 294 (Design Methodology) |
| TEM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 311 | Opportunity Analysis | The key to making sound business decisions involves the careful analysis of the situation, intelligent use of research, and successful practice. Entails the research and implementation of strategy to determine consumer expectations utilizing the skills especially important in today's competitive and turbulent market. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TEM 200 (or TMC 110) |
| TEM | 330 | Systems Innovation | Systems thinking course that investigates how innovators can incorporate the knowledge of complex systems into the processes of technology development, product/service innovation and venture development. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 330 or TEM 394 (System Innovation) |
| TEM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |

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| TEM | 400 | Technology Entrepreneurship | Introduces opportunities and challenges that accompany starting and operating an entrepreneurial venture by exploring the fundamentals and principles of entrepreneurship suitable for undergraduate business and technology students. Provides real-world, hands-on learning on what it's like to successfully transfer knowledge into products and processes that benefit society. Engages students with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only TEM 400, TEM 394 (Technology Entrepreneurship) or OMT 494 (Tech Entrepreneurship) |
| TEM | 420 | Statistics for Industry | Covers topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis. Provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems. Where possible, explores problems from the students' disciplines to insure that the principles of statistics and probability are studied in the context of the students' chosen field. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: MAT 117 or any MA General Studies course |
| TEM | 431 | Innovation Management | Focuses on execution challenges that innovation initiatives face, including: (a) Resources: Where do the resources for innovation initiatives come from? (b) Organization: How should innovation initiatives be organized? (c) Planning: How should plans for innovation initiatives be written and through what kind of process should they be revised? Explores the processes of innovation management for various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 431 or TEM 494 (Innovation Management) |
| TEM | 450 | Design for the Developing World | Learn the product design process; improve the lives of poor residents in communities at the base of the economic pyramid who earn less than \$2/day. Help improve health, energy and clean water issues among others by joining with GlobalResolve, an ASU program in the College of Technology and Innovation whose goal is to help reduce poverty through technological innovation and entrepreneurship. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: Junior, Senior or Graduate standing; Credit is allowed for only TEM 450 or TEM 494 (Design for the Developing World) |
| TEM | 455 | Global Impact Entrepreneurship | Increases awareness and understanding of the complex nature of global poverty. Students think comprehensively about sustainable ways to address by focusing on business ventures and product design, which take advantage of local resources, networks and institutions. Students design and refine technologies and services that address the needs of communities in the developing world. Examines piloted technological innovations by ASU students in the west African nation of Ghana, India, and Latin American countries such as Mexico and Peru. Analyzes technological initiatives that have been piloted in Ghana and Peru, and attempts to create sustainable business ventures for them. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Junior, Senior or Graduate (degree or nondegree) student; Credit is allowed for only TEM 455 or OMT 494 (Global Impact Entrepreneurship) |
| TEM | 460 | Lean Six Sigma Green Belt Certification | Six Sigma and Lean are fast becoming required knowledge for professionals involved in helping their companies streamline productivity and improve performance. Provides a focused and measurable management discipline, structured to reduce product and service failure rates to near perfection. Explores how Six Sigma and Lean strategies and tactics fit into a larger management systems and how to apply these techniques to solve and prevent critical business process problems. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; TEM 200 or 45 earned hours; Credit is allowed for only TEM 460 or OMT 494 (Lean Six Sigma Green Belt Certification) |
| TEM | 480 | Focus Area Project | Student research project that synthesizes knowledge across the core and the student's selected focus area. Examines a practical challenge that demonstrates technical competence related to technological entrepreneurship and management. Enhances the student's ability to focus on a topic, conduct research and present findings. | N | LEC | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 330 (or TEM 394 or TMC 394 System Innovation) or Junior standing |
| TEM | 481 | Consulting Project | Students learn about technology entrepreneurship through consulting with leaders and owners of businesses, not-for-profit organizations and government agencies. Requires both out-of-class consulting projects and in-class instructional sessions focused on technology entrepreneurship and business strategy, including financing, promoting, leading and growing the venture and consulting skills. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |

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| TEM | 482 | Startup Workshop | Students launch their own technology-based ventures with collaboration and mentorship from colleagues and faculty. Explores the fundamentals and principles of entrepreneurship suitable for undergraduate technology entrepreneurship. Provides real-world, hands-on learning on what ifs to successfully transfer knowledge into products, processes and services that benefit society. Engages with industry, talking to customers, partners and competitors, as the team encounters the chaos and uncertainty of transferring knowledge into products and processes that benefit society. | N | PRA | Y | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better |
| TEM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | |
| TEM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | | Prerequisite(s): Barrett Honors student |
| TEM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TEM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TEM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | |
| TEM | 505 | Lean Process Improvement | Develops an understanding of individual and group decisions and responsibilities for process design and improvement in work settings. Covers common problems and success stories and qualitative and quantitative techniques to measure progress toward organizational goals for a variety of industrial business situations. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 530 | Statistics Bootcamp for Industry | Provides foundational coverage of topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, chi-square tests, and simple linear regression analysis, appropriate for first-year graduate students. Additionally, provides a fundamental understanding of probability theory and statistics as used in typical industrial applications. Presents and discusses illustrative problems from technology, entrepreneurship, aviation and psychology. Where possible, explores problems from the student's discipline to insure that the principles of statistics and probability are studied in the context of the student's chosen field. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: Degree- or Nondegree-seeking graduate; Credit is allowed for only TEM 530 or 598 (Statistics Bootcamp for Industry) |
| TEM | 531 | Disruptive Innovation and Technological Evolution | Focuses on the processes of innovation management of various sizes of companies utilizing smaller scale, local processes to large scale, globally dispersed innovation processes and teams, with an emphasis on disruptive innovation and the evolution and forecasting of technology. Provides a survey of innovation management concepts and various technological forecasting and prediction approaches, both mathematical and nonmathematical, in conjunction with a study of the evolution of selected technologies and the management problems associated with emerging technologies. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 532 | Advanced Analysis of Systems | Introductory course in systems analysis and modeling. Develops basic competence in formulating and solving models of systems to aid decision making. Topics include: introduction to systems and systems modeling; a simple what-if analysis; overview and review of linear algebra and matrices; problem formulation and model development in optimization; linear programming (LP); economic interpretation and sensitivity analysis; introduction to integer programming (IP); special linear programs; project schedule network development and computations; overview of heuristic algorithms. Uses selected software in examples, short problems and in a project. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TEM | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |

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| TGM | 101 | Principles of Global Management | Provides the basic concepts of management with particular emphasis on the functions of management in a global environment. Examines the antecedents of globalization; the role of global environments in shaping organization structure, strategy and processes, as well as the basic principles of managing in complex cross-cultural settings. Emphasizes global institutional arrangements and macroeconomic issues. Serves as an introductory course that provides a quick snapshot of key issues facing global corporations today with each of the major themes explored more fully in the set of advanced courses that follow. Applies global business concepts in understanding global political economics, legal systems and socio-cultural environments. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | |
| TGM | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): Maximum 25 hours |
| TGM | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 200 | Principles of Accounting for Global Organizations | Focuses on financial and managerial accounting and examines how outsiders evaluate businesses, nonprofits and governmental operations and how economic events are reflected in a firm's financial statements, including balance sheets and cash flow statements. Examines key accounting methods that impact a company's financial statements and how they are used by shareholders, creditors, employees and customers to make credit decisions and/or value a firm's equity securities. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 204 | Principles of Marketing for Global Organizations | Explores the ways in which global marketing strategies reflect a deep understanding of markets and create valuable offerings for customers globally. Broadly speaking, marketing strategy making is comprised of segmentation, targeting and positioning. Segmentation is the process by which we segregate a relatively heterogeneous mass market into relatively homogeneous market segments. Targeting is the process by which we analyze opportunities and identify those customers where our business has the greatest prospects for success. Positioning is the process of assembling the "total offering" (product, service, distribution and price) and communicating the benefits of this "total offering" to the members of our target market. Challenges students to think critically about global competition. As such, rote learning of terms and concepts is not sufficient to prepare students to manage a business in global markets. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 268 | Intercultural Communication for Global Management | In a dynamic and interactive format, this course presents a framework of models and skills for building communication performance in competitive global business settings. Assists in implementing strategies for mastering interpersonal encounters, including conflict resolution, in multicultural environments. Examines theories of communication (the basic concepts, principles and skills vital for understanding and improving communication across racial, ethnic and cultural differences). Places students in experiential situations in order to develop valuable global management skills. Using cases, self-assessment questionnaires, multicultural team exercises and simulations, equips the global manager with the ability to solve problems and take advantage of opportunities in a multicultural world. Explores in depth intercultural theories from the TGM three regional areas—China, Latin America and the Middle East. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 300 | Principles of Finance for Global Organizations | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management; and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 353 | Regional Management Environment | Provides future global managers with the analytical tools and frameworks for understanding the political, social, cultural and economic contexts within which business activities take place in various countries and regions throughout the world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |

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| TGM | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 400 | Advanced Topics in Global Management | Focuses on advanced topics in global management designed to synthesize knowledge acquired from global business, language and cultural coursework. | N | LEC | Y | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management student; ENG 208 or MND 202 or MSA 202 or SPA 202 with C or better |
| TGM | 468 | States and Markets | Global managers operate in an international economy that presents tremendous opportunities as well as risks. Globalization has dramatically expanded opportunities for international trade, investment and economic development. At the same time, global managers have to deal with the prospect of trade wars, international financial crises and intensified competition over markets and resources. In addition, international organizations such as the International Monetary Fund, World Trade Organization and World Bank Group have a direct impact on international business operations. Develops analytical tools for understanding the rapidly changing and dynamic global political. With these tools, managers are better prepared to anticipate the risks and take advantage of opportunities in the global economy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 489 | Multinational Organizational Leadership | Explores multinational organizational management strategies, organizational practices/systems, and related managerial skills which are an essential part of global competitiveness. Develops skills to understand the application of analytical tools and frameworks, executes complex strategy, and builds and leads competitive teams and people. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): Thunderbird School of Global Management undergraduate student |
| TGM | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | | |
| TGM | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | L | |
| TGM | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-7 | | |
| TGM | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. This course may be taken only by outstanding senior students who have completed at least one semester in residence and who have a cumulative GPA of 3.00 or higher in the major or field of specialization. A special class fee may be required. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | |
| TGM | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 501 | Global Accounting | Focuses on two aspects of accounting: financial and managerial accounting. Financial accounting is about how outsiders view and evaluate an organization such as a business, a not-for-profit entity or a governmental operation. It focuses on how economic events are reflected in a firm's financial statements including a balance sheet, an income statement and a statement of cash flows. It also focuses on how financial statement information is used by various stakeholders such as shareholders, creditors, employees and customers in making decisions with regard to the firm, including credit decisions and/or valuing a firm's equity securities. Analysis and equity management accounting involves providing information, both financial and non-financial, to management and employees to aid in planning, organizing activities, and monitoring and controlling business performance. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 502 | Financial Management for Global Value Creation | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management; and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation, and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 503 | Global Marketing | Provides a managerial orientation to the topic of global marketing in today's complex, rapidly changing international business environment. A key focus is developing competitive advantage by creating customer value. Course participants gain a fundamental understanding of marketing strategy and marketing analysis (i.e., customer, competitor and company analysis) as well as an appreciation of the basic strategic issues involved in market segmentation, market targeting and market positioning in the international arena. Also examines the major tactics/tools used by global marketers to facilitate the management of their international marketing plans (i.e., product development, pricing strategies, marketing communications, distribution management). Emphasizes developing skills for entering new markets and sustaining or growing current markets. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 504 | Managing Organizations from a Global Perspective | Covers two key aspects of successfully managing an organization in a global environment. The first component covers the strategic direction of the organization, and the second component discusses how to harness the power of people in the organization to build teams and lead people to execute the strategy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 505 | States and Markets in a Global Economy | Global managers operate in an international economy that presents tremendous opportunities as well as risks. Globalization has dramatically expanded opportunities for international trade, investment and economic development. At the same time, global managers have to deal with the prospect of trade wars, international financial crises and intensified competition over markets and resources. In addition, international organizations such as the International Monetary Fund, World Trade Organization and World Bank Group have a direct impact on international business operations. Develops analytical tools for understanding the rapidly changing and dynamic global political. With these tools, managers are better prepared to anticipate the risks and take advantage of the opportunities they will encounter in the global economy. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 506 | Communicating and Negotiating Across Cultures | This dynamic and interactive course provides managers with an effective framework for achieving their goals in global management settings. Assists students to prepare for and execute time-tested strategies for achieving communication competence with persons from different cultures. Also covers negotiating in the global context. Not only examines theories of culture and communications, but also places students in an experiential situation to gain valuable skills for overcoming obstacles in global management environments. Through use of cases, multicultural team exercises, student negotiation exercises and simulations, equips the global manager with tools to solve problems and take advantage of opportunities in a multicultural world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 507 | Global Organizational Consulting: Basics | Consulting course provides an overview of the field of consulting and the role of the management consultant. Familiarizes students with the tools and techniques used during a consulting engagement, including project entry, problem definition, intervention planning, data collection, problem solving, alternative generation, feedback, project exit, client relations skills and project management. Requires students to work in project teams to solve business problems in organizations through the application and expansion of technical skills acquired in other classes. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 508 | Regional Business Environment I: Emerging Markets | As an extension of states and markets in a global economy, provides an analysis of contextual factors that influence dynamic business environments by employing frameworks that integrate political, economic, geographic, and sociocultural factors in a specific regional area. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |

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| TGM | 509 | Regional Business Environment II: Developed Economies | Provides future global managers with the analytical tools and frameworks for understanding the European business environment. Also provides a broad understanding of the region in order to be successful therein. Deals with the political, social and economic context within which business activities take place in Europe. In order to succeed as managers in the environment, requires knowledge of political, social, cultural, economic, business and regional economic factors, both across the European landscape and within individual countries. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 508 |
| TGM | 511 | Global Financial Accounting | Accrual accounting concepts, teaching students how to prepare and understand the content of traditional financial statements. Topics include the recognition and measurement of accounting events; preparation and analysis of income statements, balance sheets and statements of cash flows; and the measurement of revenue, expenses, assets, liabilities and stockholders' equity, including both U.S. and international principles. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 512 | Managerial Accounting and Decision Making in a Global Environment | Covers the development and use of managerial accounting information, including both financial and nonfinancial performance measures, in making long- and short-run decisions. Topics include cost-profit-volume analysis, cost behavior, relevant costs, job-order and processes costing, activity-based cost management and the analysis of customer profitability. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 501 or 511 |
| TGM | 521 | Managing for Global Value Creation | Equips students with the tools necessary to make strategic financing and investment decisions for value creation in a competitive global environment. Topics addressed include financial analysis and projections; working capital management and investment management (derivation of cash flows, cost of capital, discounted cash flow valuation, and capital budgeting decisions). | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 522 | Global Financial Decisions | Covers modern practices of financial decision-making and management in a market-oriented multinational framework. Topics addressed include capital structure decisions, risk management involving financial derivatives and currency hedging, cross-border investment decisions, subsidiary management, and cross-border merger and acquisitions. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 521 |
| TGM | 528 | Business Intelligence | Examines the role that business intelligence—the systematic collection, synthesis and analysis of information on the external operating environment—should play in strengthening corporate strategies and decision making. Through lectures and client-sponsored competitive assessment projects, the course has two goals: to help students understand this management tool and to train them to be able to utilize it for competitive advantage. Also addresses the related issues of corporate/industrial espionage and information security. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 504 or 540; TGM 541 |
| TGM | 530 | Big Data in the Age of the Global Economy | Creating a sustainable IT-dependent competitive advantage is a major goal for forward-thinking multinational organizations. Understands how multinational organizations make strategic use of Big Data to gain a competitive advantage in the global economy. Covers the important technological aspects of big data from a managerial viewpoint. Delves into the understanding of global data and how this data must be standardized to account for differences in collection methods, legal constraints and cultural interpretation to create a reliable platform for evaluation. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 531 | Multinational Value Chain | Exposes students to the strategies and challenges associated with moving goods, services, information and associated payments across complex, globally dispersed value chains to end customers. Topics include value-chain structures, supplier partnerships, cross-cultural issues, technology, data networks, global logistics, risk management and value-chain mapping. A field project provides students with an opportunity to work in teams applying the course concepts to increase customer value in a real value chain. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 532 | Leading Global Projects | Provides frameworks and approaches for planning and implementing complex projects and initiatives such as new product launches, IT implementations, changes in processes and new forms of partnering. Places specific emphases on tools and approaches that can be used to enhance clarity of the deliverables and manage stakeholders' expectations and engagement given limited resources and competing priorities among internal and external stakeholders. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 540 | Managing People from a Global Perspective | Explores the mix of organizational practices and people that can be the basis of sustainable competitive advantage in the contemporary global business environment. Topics covered include cross-cultural issues in managing people, traditional and emerging models of organizations, organizational culture, leadership, employee skills and motivation, reward systems and change management. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 541 | Competitive Strategy from a Global Perspective | Focuses on choices that impact the performance of the entire organization. Examines central questions: Why are some industries and firms more profitable than others? How do firms create competitive advantage? How does the choice of strategy drive organizational performance? How do firms manage scarce resources in the pursuit of strategic objectives? How do firms create unique and sustainable industry positions? | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 546 | Regional Industrial Analysis | Builds on concepts introduced in competitive strategy, global strategy and regional business environment. Focuses on the analysis of the strategies adopted by competing players and their impact on the global strategies pursued by the parent organization in the context of regional industry dynamics. Covers a spectrum of topics ranging from industry cluster formation, country-specific advantage, industry versus industry ecosystem analysis, the government's role in industry and regional development including national innovation systems, demand and supply chains in regions, and emerging market challengers. Applies multiple decision-making tools and frameworks to understand the Information and Communications Technology (ICT) industry in Asia Pacific -the fastest growing region in the world. Tools and frameworks learned in this course are applicable to other regions and other industries. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |
| TGM | 547 | Leading Change and Transformation in a Global Environment | Increases understanding of the nature of organizational change (through conceptual frameworks, readings and discussions). Specifies skills needed for managing change. Enhances sensitivity to the contribution and consequences of the human element as related to change. Helps student's own capacity to "thrive on change." | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 540 |
| TGM | 548 | Global Strategy | Focuses on how global firms create value. Covers topics ranging from country-specific competitive advantage and the notion of distance to alternative global strategy archetypes and sources of competitive advantage for emerging market multinationals. The approach applies multiple decision-making tools and frameworks to untangle the complexities of managing in a global corporation. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 541 |
| TGM | 549 | Global Leadership | Explores the concept of effective leadership within and across a variety of organizations and global contexts. Definitions of "leadership" and strategies for becoming an accomplished leader abound. Rather than attempt to narrowly focus our attention on definitions, leadership styles, and supposedly "definitive" theories of leadership, focuses on the demands of and competencies associated with excellent leadership. Most importantly, examines how leaders sense the need for and then manage organizational change. Given the increasingly complex world we live in and the ongoing and rapid rate of change, change management has become one of the most critical of leadership skills. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 504 or 540 |
| TGM | 551 | Global Marketing Strategy | Covers the major concepts involved in creating and sustaining customer value, analyzing the firm's macro environment, choosing whether or not to enter a foreign market, how to evaluate different foreign markets, the best methods for entering different markets, the market research design process, understanding consumer and B2B customer behavior, and ethical issues encountered in global marketing. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 552 | Global Marketing Management | Covers the functional aspects of marketing including decisions relating to segmentation, targeting, branding, product development, pricing, distribution and advertising/promotion. Students integrate their knowledge of these topics through the creation of an international marketing plan based on a product or service and in a country approved by the instructor. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |

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| TGM | 579 | Communicating in a Global Context | In a dynamic and interactive format, presents a framework of models and skills for building communication performance in competitive global business settings. Assists in implementing strategies for mastering interpersonal encounters, including conflict resolution, in multicultural environments. Not only examines theories of communication, but places students in experiential situations in which they develop valuable global management skills. Using cases, self-assessment questionnaires, multicultural team exercises and simulations, equips the global manager with the ability to solve problems and take advantage of opportunities in a multicultural world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 581 | Negotiating in a Global Context | Provide students with knowledge, skills, insights and experience necessary to be a competent negotiator. Covers theories of cross-cultural negotiation and how these impact business interactions. Students gain insight into personal and cultural underpinnings that influences cognitive, affective and negotiation behavioral processes. Expands skills in achieving communication and negotiating competence through the understanding and practice of increased appropriateness, flexibility and adaptability. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 2 | | Prerequisite(s): graduate Thunderbird School of Global Management student |
| TGM | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 584 | Internship | Structured practical experience that follows a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 585 | Corporate Social Responsibility in a Global Context | Provides knowledge, skills, insights and experience necessary to be a competent negotiator. Covers theories of cross-cultural negotiation and how these impact business interactions. Students gain insight into personal and cultural underpinnings that influences cognitive, affective and negotiation behavioral processes. Expands skills in achieving communication and negotiating competence through the understanding and practice of increased appropriateness, flexibility and adaptability. Corporate Social Responsibility (CSR) has become essential for corporations seeking to succeed in an intensely competitive global economy. Provides an in-depth understanding of what CSR is, how to apply it effectively in an international context and how to manage it well. Using a case-based approach, focuses on actual experiences of corporations that have used CSR strategies successfully--and unsuccessfully--to draw practical lessons for international managers. Incorporates several guest lectures from executives who share their firsthand experiences with CSR in various regions of the world. | N | LEC | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-3 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505 |
| TGM | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic or writing a literature review of a topic. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 591 | Seminar | A small class emphasizing discussion, presentations by students and written research papers. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 592 | Research | Independent study that is expected to lead to a specific project such as a thesis or dissertation, report or publication, in which a student conducts research under the supervision of a faculty member. Assignments might include data collection, experimental work, data analysis or preparation of a manuscript. | Y | RSC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| TGM | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded and no grade is assigned. | Y | RSC | Y | Z3 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1 | | |

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| TGM | 596 | Thunderbird Experiential Practicum | Capstone course offering students an opportunity to apply the full range of professional skills they have acquired during graduate business and management studies. Consists of participation in a consulting project for a client system in an emerging market country, including Central America, Latin America, the Middle East, Africa, central and eastern Europe, and the whole of Asia apart from Hong Kong, Japan, Singapore, Australia and New Zealand. Serves all sectors: public/governmental, private and NGO/nonprofit. | N | PRA | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-6 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 501 or 512; TGM 502 or 522; TGM 503 or 552; TGM 505 or POS 586; TGM 506 or 579; TGM 508; TGM 581, OR Master of Arts in Global Affairs and Management major: TGM 507 |
| TGM | 597 | Thunderbird Integrative Experience | Provides a capstone experience that integrates content from several business areas including strategy, finance, cross-cultural communication, supply chains, leadership, operations and accounting. May take the form of an integrative business computer simulation or a seminar drawing on faculty from a variety of business areas to highlight key issues in those areas. | N | LEL | N | GNA | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1 | | Prerequisite(s): graduate Thunderbird School of Global Management student; TGM 505; TGM 512; TGM 522; TGM 530; TGM 541; TGM 552; Corequisite(s): TGM 548 |
| TGM | 598 | Special Topics | Topical courses not offered in regular course rotation (e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand). | Y | LEC | Y | OPT | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-4 | | |
| TGM | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Thunderbird Sch of Global Mgmt | Thunderbird School of Global Management | 1-12 | | |
| THA | 101 | Elementary Thai I | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose readings in Thai script. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | |
| THA | 102 | Elementary Thai II | Basic communication, reading, and writing skills. Intensive oral/aural classroom drill supplemented by prose reading. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | | Pre-requisites:THA 101 with a grade of C or better |
| THA | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | Prerequisite: Freshman with minimum 25 hours |
| THA | 201 | Intermediate Thai I | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 102 with C or better |
| THA | 202 | Intermediate Thai II | Systematic review of grammar. Continued development of communication skills with increased emphasis on reading and writing. | N | LEL | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:THA 201 with C or better |
| THE | 100 | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): non-Theatre and non-Film students only |
| THE | 100 | Introduction to Theatre | Surveys theatre production from the Greeks to contemporary theatre. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| THE | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THE | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 320 | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: THF 220 with C or better; THE 220 with C or better |
| THE | 320 | History of the Theatre I | Centers on the historiography of world theatre as art, as a medium of cultural expression and as a social institution. Involves, along with the reading of plays, advanced methodological approaches to studying the creation of theatre within cultural and political contexts. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & H | Prerequisites: THF 220 with C or better; THE 220 with C or better |
| THE | 321 | History of the Theatre II | Traces major developments in theatre production from the 17th century to modern times. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Pre-requisites: THE 220 (or THF 220) with C or better; THE 320 with C or better |
| THE | 322 | Theatre History and Culture | Critically examines major developments in theatre history, historiography, and dramatic literature. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & H | Prerequisites: Must NOT be a Theatre student |
| THE | 325 | Play Reading for Educational Theatre | Assigned independent readings in plays for secondary school play production. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisites: Theatre student |
| THE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | 403 | Independent Film | Examines the independent film movement from the French New Wave to contemporary independent filmmakers. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisites: ENG 102, 105 or 108 with C or better |
| THE | 404 | World Cinema | Films and filmmakers from Europe, Asia, Australia, the Far East, South America, and the Caribbean. Emphasizes cultural content and filmmaking philosophies. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | G | Prerequisites: ENG 102, 105 or 108 with C or better |

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| THE | 405 | Film: Great Performers and Directors | Examines processes and influences of one or more great film performers and/or directors. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Pre-requisites: ENG102, 105 or 108 with C or better |
| THE | 406 | American Multicultural Film | Examines Native, African, Asian, and Latina and Latino American films and film artists in cinema history and production. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG102, 105 or 108 with C or better |
| THE | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| THE | 420 | Theatre in America | Examines the major movements and pivotal moments in the history of American theatre from the 1700s to its current state, particularly its efforts to establish an identity that reflects the unique and changing citizenry of the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | Prerequisite(s): minimum 40 hours. Credit is allowed for only AMS 420 or IAP 420 or THE 420 |
| THE | 421 | Shakespeare: Stage and Film | Examines Shakespeare's plays as written texts, stage performances, and film productions. Focuses on play reading, performance analysis, and film critique. Online course. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: ENG 102, 105 or 108 with C or better |
| THE | 422 | Latina and Latino Theatre and Film | Explores issues of cultural identity through critical analysis of theatre and film by Latina and Latino artists in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | HU & C | Pre-requisites: ENG 102, 105 or 108 with C or better OR Theatre Masters students |
| THE | 423 | African American Theatre | Readings, discussion, video of the history and dramatic literature of African American playwrights and theatre companies in the United States. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisites: ENG 102, 105 or 108 with C or better, or Masters student |
| THE | 424 | Trends in Theatre for Youth | Surveys the history, literature, and contemporary practices in theatre for youth. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THE | 425 | Chekhov and Russian Drama | An in-depth study of Chekhov's major works, representative short stories and major plays, including "The Cherry Orchard" and "Three Sisters". Taught in English. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisite: ENG 102, 105 or 108 with C or better; Credit is allowed for only RUS or THE 425 |
| THE | 426 | Pre-Columbian Theatre of the Americas | Selected studies in pre-Columbian theatre forms and texts of the Aztecs, Mayans, Caribbean islands, and North American Indians. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-quisites: ENG102, 105 or 108 with C or better, or Masters Theatre student |
| THE | 429 | Studies in European Literature and Culture | Literary, cultural, and historical issues. | N | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: ENG 200 and one other 200-level Literature course with C or better; Credit is allowed for only ENG, SLC or THE 429 |
| THE | 430 | History of Fashion | Fashion is rarely set but rather evolves with eras of upheaval between one generation and the next. Clothes express the personality and rank of the individual creating an instantaneous and lasting impression. Introduces over 400 years of Western fashion history drawing parallels between the fashion and the period in which it existed. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Sophomore standing or higher; Minimum GPA 2.50 |
| THE | 440 | Experimental Theatre and Performance | Explores 20th-century modernist theatrical forms and movements and development of alternative strategies for analyzing contemporary theatre and performance. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): Theatre undergraduate student; THF 220 (THE 220) with C or better; THE 320 with C or better |
| THE | 480 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th- through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum junior standing; Credit is allowed for only THE 480 or 581 |
| THE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Pre-requisites: Barrett Honors Theatre or Film student |
| THE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THE | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | |
| THE | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | | |
| THE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |

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| THE | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| THE | 500 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): graduate School of Film, Dance and Theatre major |
| THE | 504 | Studies in Dramatic Theory and Criticism | Surveys dramatic theory, criticism, and aesthetics as they relate to contemporary performance. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 505 | Critical Theory and Performance | Surveys contemporary theories of culture as they apply to theatre and performance studies. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre graduate student |
| THE | 510 | Studies in Literature | Assigned individual reading program in standard sources and masterpieces in theatre literature. May be repeated for credit. | N | RSC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite: Must be a Theatre Education or Theatre for Youth student |
| THE | 520 | Theatre History and Literature | Surveys historiographical issues and dramatic literature related to key periods in theatre history. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THE | 524 | Advanced Studies in Theatre for Youth | In-depth study of the history, literature, and contemporary practice of theatre for young audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre Education or Theatre for Youth student |
| THE | 525 | Advanced Studies in Theatre for Youth II | Project-oriented explorations of theory and practice of contemporary theatre for youth audiences. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THE 524 with B or better |
| THE | 562 | Literary Management Workshop | Advanced literary management for the contemporary theatre, including trends in new play development, festivals and productions throughout the United States. Participation in Arizona Playwriting Competition. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 560 with B or better |
| THE | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 581 | Methods of Teaching Theatre | Applies materials, techniques, and theories for theatre with 9th- through 12th-grade students. Emphasizes curriculum development and praxis. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate (degree or non-degree) student. Credit is allowed for only THE 480 or 581 |
| THE | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | RSC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THE | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THE | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| THE | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art Theatre student |
| THE | 600 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |

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| THE | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THE | 700 | Research Methods | Course on research methods in a specific discipline. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisite: Must be a Theatre Education or Theatre for Youth student or have instructor approval. |
| THE | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THE | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre student |
| THE | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THE | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-15 | | |
| THF | 101 | Acting Introduction | Introduces basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Must not be a Theatre student |
| THF | 125 | Orientation to Film, Dance and Theatre | Orientation to university and school resources and procedures. Academic success strategies, mentorship, goal setting. Community-building exercises. | N | REC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Prerequisite(s): BA Film (Film and Media Production or Filmmaking Practices) or BA Performance and Movement or BA Theatre (Acting or Design and Production or Theatre Exploratory) major; freshman standing |
| THF | 126 | School of Film, Dance and Theatre: First-Year Experience | Community building within the School of Film, Dance and Theatre; connections with faculty; foundations of creative process; attendance and written response to performance and media events. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2 | | Prerequisite(s): BA Film (Film and Media Production or Filmmaking Practices) or BA Performance and Movement or BA Theatre (Acting or Design and Production or Theatre Exploratory) major |
| THF | 160 | Introduction to Storytelling | Introduces the nature, structure, and operations of story, as well as the functions of narrative in societies and cultures. Several modules introduce a different mode of storytelling. Students learn to create their own stories utilizing several of the approaches introduced in the modules. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Film or BA Performance and Movement or BA Theatre major |
| THF | 215 | Design and Composition for Theatre and Film | Introduces the aesthetic principles and practices employed by designers/artists of the stage and screen, including: basic knowledge of the elements and principles of design; conceptualization of design for theatre and film; director/designer collaboration models; methods and modes of visual communication for theatre and film (storyboards, renderings, models, etc.). | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): BA Digital Culture (Theatre) or BA The Arts (Entertainment Design) or BA The Arts (Fashion Design) major OR School of Theatre and Film major |
| THF | 220 | Principles of Dramatic Analysis | Analysis, evaluation, and interpretation of dramatic literature for theatrical production. Emphasizes the traditional canon of dramatic literature and traditional structures and forms of drama. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L or HU | Pre-requisites: School of Theatre and Film major or Theatre Exploratory major with minimum sophomore level; ENG 101, 105 or 107 with C or better; Pre- or Co-requisite: THF 126 with C or better |
| THF | 397 | Professional Development Seminar | Preparatory course for senior projects. Students research and create senior project proposals while formalizing faculty mentorships. | Y | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THF | 497 | Senior Project | Mentored practicum for culminating capstone projects. | N | PRA | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): THF 397 with C or better; Film BA or Performance and Movement BA or Theatre BA major; Minimum 56 hours |
| THP | 102 | Acting I: Fundamentals | Explores and applies basic principles of acting. Topics include terminology, scene and character analysis, exercises and improvisation, audition preparation. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Performance and Movement or Theatre major |
| THP | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |

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| THP | 201 | Theatre Production Crew | Participation in university mainstage theatre production backstage and board operations. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | |
| THP | 202 | Acting II: Intermediate Techniques | Rehearsal techniques and application of action to dramatic text. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 or THP 102 with B or better; THP 272, 277 with B- or better. Pre- or corequisite(s): THF 220 (THE 220) with C or better if completed |
| THP | 212 | Puppetry with Children | Construction and manipulation of puppets; practice in performance skills. Emphasizes educational and recreational uses of puppetry by and with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 213 | Introduction to Technical Theatre | Procedures of technical theatre production and demonstration. Topics include design and construction of scenery, lighting, and properties. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Pre-requisites: Theatre or Digital Culture (Theatre) student |
| THP | 214 | Introduction to Costuming | Basic principles of costume design, construction, and survey of selected historical periods including makeup styles. Costume design project and production experience. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 4 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 218 | Directing I: Introduction to Directing | Overview of emergence and practice of the director's craft. Explores director's role and responsibilities, play selection, conceptualizing, ground plans, blocking. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THF 220 with C or better; THP 102 with C or better |
| THP | 251 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 260 | Introduction to Playwriting | Basic skills of playwriting including exercises in monologues, scenes, and conflict and resolution, leading to completion of a one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: ENG101,105 or 107 with C or better |
| THP | 272 | Acting: Introduction to Movement | Movement vocabulary and physical training in relaxation, alignment, conditioning, and stage presence. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 277 | Acting: Introduction to Voice | Exercises and techniques to free the voice and improve quality and projection. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF101 or THP102 with B- or better |
| THP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 301 | Theatre Production | Participation in university mainstage theatre productions (e.g., acting, construction, stage management). | Y | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 213 or THP 214 with C or better |
| THP | 302 | Acting III: Advanced Techniques | Advanced practice in methods, skills, and research for rehearsal and performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s) with C or better: THF 101 or THP 102; THF 220 (THE 220); THP 202, 272, 277; minimum junior standing |
| THP | 307 | Acting: Research and Performance | Acting in theatre projects, productions, or collaborative performances in directing classes. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisite: THF 101 (or THP 101 or THP 102) with C or better |
| THP | 311 | Creative Drama with Youth | Theories, materials, and techniques for facilitating improvisational drama with children and youth in classroom and community settings. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | L | Prerequisite(s): ENG 101 (or ENG 105 or 107) with C or better; minimum 25 hours |
| THP | 313 | Fundamentals of Design | Art and practice of scenic, costume, and lighting design for the theatre and the media. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 213 or THP 214 with C or better or Digital Culture (Theatre) major |
| THP | 317 | Stage Management | Readings in stage management and participation as a stage manager in a university theatre production. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre undergraduate student; Corequisite: THP 301 |
| THP | 318 | Directing II: Intermediate Directing | Explores approaches to staging and composition. Studio work culminates in presentation of a fully rehearsed ten-minute play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP218 with C or better; THP213 or THP214 with C or better |
| THP | 330 | Costume Design | Explores the elements of design, taking abstract ideas and formulating them into concrete forms. Encourages the student to experiment with different ideas and mediums. Emphasizes design basics, research, figure drawing, and beginning rendering techniques. Uses projects that involve complex script and character analysis to promote the student's ability to effectively communicate. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THF 215 or THP 313 with C or better |
| THP | 331 | Costume Construction | Uses of materials and techniques for stage costumes with actual construction of period apparel. May be repeated for credit. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 214 with C or better |
| THP | 332 | Makeup | Practical guide to the theory and practice of theatrical makeup. Basic principles of stage makeup design and application. Develops and increases skills in the application and design of the medium through a combination of reading assignments, lecture, demonstration and supervised practice sessions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Theatre (Design and Production) major or minimum 45 hours; Credit is allowed for only THP 332 or 494 (Makeup/Advanced Makeup) |
| THP | 335 | Advanced Stagecraft | Advanced construction techniques through applicable projects in carpentry and steel fabrication for theatre production in scenery and properties. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Minimum sophomore standing; THP 213 (or THP 301 Production) with B or better; Credit is allowed for only THP 335 or 394 (Advanced Stagecraft) |
| THP | 340 | Scene Design | Studio projects in designing scenery for contemporary stages. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: THP 213 with C or better and THE 220 with C or better; or Digital Culture (Theatre) major |
| THP | 345 | Lighting Design | Principles and theories of stage lighting design, including design process and execution, advanced exploration of design implementation and equipment; course includes drafting and drawing. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum Junior standing or Design & Production student with minimum sophomore standing |

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| THP | 350 | Sound Design | Introduces the equipment, process, and recording techniques used in sound design for the theatre. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre or Film student or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 351 | Arts Management | Management, organizational behavior, and human behavior in the arts; marketing, financing, and budgeting for the arts. | N | LEC | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: BA The Arts major or minimum 45 hours; Credit is allowed for only THP 351 or 394 (Management and the Arts) |
| THP | 355 | Media Design for Performance | Introduces the fundamental skills, practices and theories for media and projection design for live performance, building on traditional areas of design for the theatre. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Theatre and Film or Digital Culture (Theatre) student; THF 215 or THP 313 with B- or better |
| THP | 360 | Intermediate Playwriting | Continued development of skills in playwriting through specific exercises and completion of a full-length play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre- or Co-requisite: THP 260 (with C or better if completed) or Pre-requisite: ENG 210 |
| THP | 372 | Acting: Advanced Movement | Movement techniques for the classical and nonrealistic theatre. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 272 with B or better; Minimum junior standing |
| THP | 377 | Acting: Voice and Speech | Introduces phonetic alphabet, exercises, and techniques for voice and speech improvement. Application to performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 277 with B or better; Minimum junior standing |
| THP | 385 | Acting: Classical and Poetic Drama | Rehearsal and performance of Shakespeare and other classical playwrights. Emphasizes understanding poetic language, vocal and physical skills. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 (or THP 102) with B- or better; THP 277 with B- or better |
| THP | 386 | Acting: the Meisner Approach | Improvisations and exercises developed by Sanford Meisner applied to scene work. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 101 or THP 102 with B or better |
| THP | 387 | Acting: TV and Film | Professional television and film acting techniques, terminology, and on-camera experience. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre major, Theatre minor or Filmmaking Practices major; THF101 (THP 101) or THP102 with B or better, or Film and Media Production student |
| THP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEL | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 401 | Theatre Practicum | Production assignments for advanced students of technical production, stage and business management, and design. | N | LAB | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-2 | | Prerequisites: THP 301 with a C or better, or Master of Arts or Master of Fine Arts student |
| THP | 406 | Advanced Scenography | Process of production collaboration among scenographers, directors, and playwrights. Taught in conjunction with THP 519. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master in Fine Arts student; THP 340 plus one of the following: THP 214, THP 313, or THP 345 with C or better |
| THP | 411 | Methods of Teaching Drama | Applies materials, techniques, and theories with grades K-8 youth. Regular participation with children. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 311 with A- or better or Graduate student; Credit is allowed for only THP 411 or 511 |
| THP | 418 | Directing III: Advanced Directing | Studio work building on skills learned in intermediate directing, culminating in the presentation of a fully rehearsed one-act play. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 318 with C or better or Herberger Master of Art or Master of Fine Arts student |
| THP | 420 | Acting: Solo and Collaborative Performance | Creation and development of original performance art works combining text, movement, multimedia, visual art; the actor as writer, designer, performer. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THF 101 or THP 102; minimum junior standing |
| THP | 428 | Theatre and the Future | Senior projects course that includes a culminating creative synthesis of student's knowledge. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre student; THP 201 or THP 301 with C or better; THE 440 with C or better |
| THP | 431 | Advanced Costume Construction | Specialized training in costume construction problems and crafts with projects in tailoring, millinery, and period accessories. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Theatre Design & Production or Digital Culture (Theatre) students; THP 214 and 331 with C or better or Theatre Performance Design student |
| THP | 435 | Technical Direction | Seminar in fundamental principles and practices of technical directors as managers, engineers and artisans in theatre production. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Minimum junior standing; THP 213 and 301 (Theatrical Construction) OR THP 301 (Production) with B or better; Credit is allowed for only THP 435 or 494 (Technical Direction) |
| THP | 440 | Advanced Scene Design | Advanced studio projects in designing scenery for a variety of stage forms. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or must be a Theatre Scenography or Performance Design student |
| THP | 441 | Scene Painting | Studio projects in painting stage scenery. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 340 with C or better, or Theatre Scenography or Performance Design student |
| THP | 442 | Drawing | Techniques in drawing and rendering for scenic, costume, and lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Digital Culture (Theatre) or The Arts (Entertainment Design) or The Arts (Fashion Design) or Theatre major |
| THP | 444 | Drafting for the Stage | Fundamentals of and practice in graphic techniques for the stage. Introduces computer-aided design for the stage. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP 213 with C or better, or Theatre Performance Design or Digital Culture (Theatre) student |
| THP | 445 | Advanced Lighting Design | Specialized techniques in stage lighting. Advanced application of design process, graphic techniques of design presentation, and use of qualities of light. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: THP345 C or better, or Theatre Scenography or Performance Design student AND THP444 with B or better |
| THP | 448 | AutoCAD for Live Entertainment | Comprehension and practice of two-dimensional drafting techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THF 215 or THP 313 with C or better or Theatre Design and Production major; Credit is allowed for only THP 448 or 494 (AUTOCAD) |
| THP | 449 | AutoCAD 3D for Live Entertainment | Comprehension and practice of 3D drafting and rendering techniques in AutoCAD. Focuses on applications in live entertainment. | N | LEL | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: THP 448 with C or better; Credit is allowed for only THP 449 or 494 (AutoCAD 3D) |
| THP | 450 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Herberger Institute for Design and the Arts student |
| THP | 451 | Student Production Board | Performing arts entrepreneurship taught through the experience of operating a student-produced theatre company. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre/Co-requisite: THP 450 |

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| THP | 452 | Arts Entrepreneurship Seminar | Challenges students to learn how individuals have used their creative skills to create new arts business models. Case studies examine how creativity can spur new opportunities in the arts industry. Students complete their own project proposals. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: THP 352 with C or better |
| THP | 455 | Advanced Media Design | Explores advanced skills, practices and theories for media and projection design for live performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Dance, Film or Theatre major; THP 355 with C or better; Credit is allowed for only THP 455 or THP 494 (Advanced Media Design) |
| THP | 457 | Digital Portfolio | Cross-disciplinary exploration of methods, technologies and aesthetics of portfolio presentation for professional designers and artists. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): The Arts (Fashion Design) or Theatre (Design and Production) major; minimum 56 hours. Credit is allowed for only THP 457 or 494 (Digital Portfolio) |
| THP | 482 | Theatre for Social Change | Interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | C | Prerequisite: Minimum sophomore standing |
| THP | 483 | Acting: Viewpoints and Composition | Training in Anne Bogart's viewpoints and composition techniques; application to rehearsal and performance, and creating new work. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 202 with C or better (or BA Performance and Movement major), junior standing or higher or MFA major |
| THP | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite(s): Theatre or Film student |
| THP | 489 | Acting: Audition Techniques and Career Development | Familiarization with the business of performance: preparation and techniques for auditioning; self-promotion and marketing strategies; grant resources, interviews, and unions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): THP 102 or THF 101 with B or better; THF 220 (THE 220) with B or better; minimum junior standing |
| THP | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | | Prerequisite(s): Barrett Honors student |
| THP | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-6 | L | Prerequisite(s): Barrett Honors student |
| THP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | |
| THP | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | SEM | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| THP | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-7 | | Prerequisites: Theatre Design & Production student |
| THP | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | |
| THP | 501 | Performance: Solo Performance | Students begin to define their mission in art. Emphasizes the actor as a solo storyteller, speaking as herself or himself. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-8 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student |
| THP | 505 | Graduate Colloquium | Orientation to graduate study of theatrical practice; cohort development, introduction to the advanced literature and media in the art form. | N | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1 | | Pre-requisites: Master of Fine Art Theatre student |
| THP | 506 | Design Collaboration | Process of production collaboration. Taught in conjunction with THP 519. May be repeated for credit. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts or Master of Fine Arts Theatre student; |
| THP | 511 | Methods of Teaching Drama | Applies dramatic materials, techniques, and theories with grades K-8 youth. Regular participation with children. Credit is allowed for only THP 511 or 411. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 512 | Puppetry Workshop | Surveys puppetry in education, puppetry as an art form in design and performance. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student |
| THP | 513 | Touring Theatre | Provides an understanding of the theories and aesthetics of touring theatre and a practice in its conceptualization, creation, administration, and production. Examines a variety of styles and methods of creating "movable" theatrical material, focusing on forms that require minimal scenic and design support. Focuses on process and working toward a quality product. | N | LEL | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Fine Arts Graduate student; Credit is allowed for only THP 513 or 598 (Touring Theatre) |
| THP | 514 | Projects in Community-Based Theatre | Theories and techniques of improvisational theatre with emphasis on youth. Stresses professional development through projects combining research, theory, and practice. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite: Master in Arts, Master in Fine Arts or PHD Theatre major |
| THP | 517 | Stage Management | Advanced study of the principles and practices of stage management in the professional theatre. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 518 | Advanced Directing Lab | Active discovery of directing concepts through practical exercises and collaboration; deconstruction of contemporary/classic literature. Explores director as primary artist. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |

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| THP | 519 | Directing: Works in Progress | Advanced projects in directing concentrating on a collaborative process among director, playwright, actors, and designers. Focuses primarily on new scripts or adaptations of literature. | N | STO | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 520 | Directing the New Play | Advanced methods and studies in directing, focusing on new play development. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 521 | Performance I: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination; emphasizes physical diagnostics and development. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 522 | Performance I: Acting and Voice | Advanced studio work in the performer's voice; emphasizes physical awareness, vocal anatomy, training, and interpretation of texts. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 523 | Performance II: Acting and Movement | Advanced studio work in the performer's body, voice, emotion, and imagination. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 524 | Performance II: Acting and Voice | Advanced studio work in the performer's voice. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 525 | Design I: Conceptualization and Collaboration | Conceptual structures of the design process in theatre; development of creativity, flexibility, and communication in the collaborative process. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 526 | Design I: Drawing and Rendering | Development of drawing and rendering skills, techniques, and evaluation in the presentation, realization, and communication of performance design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 527 | Design II: Conceptualization and Collaboration | Offers students the chance to develop advanced skills in creating fully realized design ideas, particularly in working with new and experimental forms. Through the coursework, readings, and projects, students develop new methods and systems of thought for dealing with challenging dramatic works. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisite(s): Master of Fine Arts Theatre major |
| THP | 528 | Design II: Visualization and Presentation | Advanced skills and techniques in rendering, visualizing and presenting design ideas and materials for performance. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 529 | Viewpoints and Composition | | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | |
| THP | 540 | Scene Design Applications | Conceptual and practical application of the design process including graphic and sculptural projects. Practical design problems investigated in a lab. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Art or Master of Fine Art Theatre student |
| THP | 545 | Lighting Design Applications | Advanced studio projects in stage lighting design. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 550 | Theatre Organization and Management | Overview of nonprofit arts: organizational design, strategic planning, financial management, and leadership. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: MFA Theatre student |
| THP | 551 | Arts Management | Advanced study of the principles and practices of arts management in the nonprofit and for-profit sectors. | N | SEM | N | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 552 | Arts Entrepreneurship | Project-based course in new venture creation for the arts. | N | SEM | Y | GNA | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Graduate student in the Herberger Institute for Design and the Arts, the School of Community Resources and Development, or the W.P. Carey School of Business |
| THP | 555 | Media Design Applications | Advanced applications for skills and practices in media design for live performance, including content creation, systems design, and playback. | N | STO | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Master of Fine Arts Theatre student |
| THP | 556 | Performance Technology | Examines issues surrounding the integration of live performance and digital media. Students study the work of contemporary practitioners and theorists and experiment with creating their own works of digital art. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate Theatre major |
| THP | 557 | The Digital Portfolio | Crossdisciplinary exploration of methods, technologies, and aesthetics for portfolio presentation for professional designers and artists. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisites: Herberger Institute of Design and the Arts Graduate student |
| THP | 560 | Dramatic Writer's Workshop | Practice and study of creating characters, dialogue, scenes, plays, and monologues for the stage. | N | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre Master of Arts or Master of Fine Arts student |
| THP | 561 | Scripts in Progress | Studio work with the instructor centered on revisions of original plays. | N | IND | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Theatre student |
| THP | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 582 | Theatre for Social Change | Advanced, interactive theatre techniques (e.g., Boal, drama therapy, playback theatre) to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. | N | LEL | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Pre-requisite: Graduate or Doctoral student |
| THP | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Theatre student |
| THP | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |

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| THP | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Theatre Master of Arts of Master of Fine Arts student |
| THP | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| THP | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Pre-requisites: Fine Arts Graduate student |
| THP | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEL | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-4 | | Prerequisite(s): Fine Arts graduate student |
| THP | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Art or Dramatic Writing Theatre student |
| THP | 611 | Research in Drama Education | Current research practices in drama education. Development and execution of research projects in ethnographic and arts-based models. | N | SEM | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 618 | Theatre for Youth Practicum | Practical experience in theatre for youth projects: improvisation, education, production. | N | PRA | N | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 2-3 | | Prerequisites: Master of Fine Arts or PhD Theatre for Youth student |
| THP | 649 | Design Studio | Projects include design of scenery, costume, lighting, or sound for lab or mainstage productions. | N | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-3 | | Prerequisites: Master of Fine Arts Theatre student |
| THP | 680 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisites: Master of Fine Arts or PhD Theatre student |
| THP | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | |
| THP | 693 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | RSC | Y | Z1 | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| THP | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | RSC | Y | OPT | Herberger Inst Design & Arts | School of Film, Dance and Theatre | 1-12 | | Prerequisite: Master of Arts, Master of Fine Arts, or PhD Theatre student |
| TMC | 110 | Understanding the Enterprise | Introduces essential functions required in technology-based and innovative enterprises and viewed in the context of their relationship to each other; examines the enterprise's role in society. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Credit is allowed for only TMC 110 or TEM 194 (Introduction to Technology Development) |
| TMC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 300 | Career Management | Provides professional program business administration students with information on ASU business-related courses, business careers, interviewing, job hunting, and résumé skills. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): minimum 56 hours |
| TMC | 310 | Promotion of the Enterprise | Building and maintaining customers with an emphasis on developing a market identity and sales for technology-based and innovative enterprises. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisites: TMC 110 OR minimum 56 hours |
| TMC | 320 | Funding the Enterprise | Focuses on financial resource management techniques utilized by U.S. domestic companies and covers the unique aspects of revenue accounting and its application to company operations. Concepts covered include: data capture of requisite information from various computer systems; determination of revenues generated from sales of products and services to customers; in-depth analysis of operational expenses; preparation of accounting and financial data; monthly accounting requirements; account reconciliation; monthly/quarterly/annual reporting; development and analysis of financial reports and billing. Emphasizes accounting, planning and valuation concerns, as well as financial trends and industry prospects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): TMC 110 or TEM 194 (Introduction to Technology Development) OR IFT major: IFT 100 |

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| TMC | 330 | Leading the Enterprise | Essential practices for managers, including planning, organizing, leading and controlling the enterprise. Studies current issues affecting managers such as sustainability, environmental protection, work groups, globalization, technology management, entrepreneurship, diversity and continuous improvement. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): minimum junior standing |
| TMC | 331 | Quality Assurance | Instrumentation and methodologies for materials testing and quality control in various manufacturing processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre- or corequisite(s): ABS 350 (or AGB 360, ECN 221, EGR 280, PSY 230, STP 420, STS 401 or TEM 420); TMC 330 (or TMC 346) |
| TMC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 396 | Professional Orientation | Senior advising, industry presentations, and career counseling. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum junior standing; Credit is allowed for only TMC 396 or GIT 396 |
| TMC | 410 | Enterprise Operations | Emphasizes basic principles of enterprise operations management, including productivity, strategic management, global environment, forecasting, capacity planning, new technologies, location and layout strategies, supply-chain management, inventory control and scheduling. Uses common decision-making issues and related qualitative and quantitative techniques. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 |
| TMC | 430 | Enterprise Strategy and Innovation | Enterprise strategic plan development and implementation, concepts of open innovation; vision, mission, steps of strategic plan development; strategic goals, objectives, tasks, schedule, resource considerations; organization's strengths and weaknesses; environmental opportunities and threats; strategy implementation, impact assessment and refinement, organizational- and management considerations, theory and practice of open innovation. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330; Credit is allowed for only OMT 494, Strategic Planng/Mgt or TMC 430 |
| TMC | 470 | Enterprise Planning and Implementation | Investigates and tests tools and techniques for effective design and management of enterprise projects and programs using computer applications. Develops and demonstrates teambuilding and leadership skills in course projects. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Pre-requisite: TMC 330 OR W.P. Carey BA Technology major with MGT 300. Credit is allowed for only OMT 570 or TMC 470 |
| TMC | 480 | Senior Project | Capstone project experience refining skills in communication, research and information retrieval, critical analysis and criticism, and demonstrating technical competence in each student's area of study. | N | LEC | N | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): TMC 430; senior standing |
| TMC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-4 | | |
| TMC | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-7 | | Prerequisites:Fulton Polytechnic School undergraduate or graduate student AND have a 2.25 GPA or better |
| TMC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-3 | | Prerequisite(s): Fulton Polytechnic School undergraduate; minimum 3.00 GPA |
| TMC | 555 | Leadership and Teams | Evaluates and discusses the latest research in leadership and teams in terms of accomplishing set goals efficiently and effectively both within large organizations and smaller groups. Addresses management and leadership styles and concepts such as team cognition and team situational awareness. Seminar-style course with a large amount of reading, discussion, synthesis and application of current research. Field trips to local airline operations and high-operational tempo organizations accompany the readings and in-class discussions. | N | LEC | N | GNA | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TMC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |

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| TMC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1 | | Pre Requisites: Graduate or Non Degree Students Only |
| TMC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Tech Entrepreneurship & Mgmt | 1-12 | | Pre Requisites: Graduate or Non Degree Students Only |
| TSS | 500 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 501 | A Deep History of the United States/Mexico Borderlands I | Using a comparative and relational approach, the seminar explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from pre-contact times to the Mexican American War. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 502 | Foundations of Transborder Studies | Using a comparative and relational approach, explores various layers of development starting with economic structures and culture and their impact on various aspects of transborder society including politics, social organization, demography, and cultural practice. Focuses on the period from the Mexican American War to the recent past. Centers on comparative economic growth and development of Mexico and the United States, the impact of unequal development on the border region and its people, and the development of a transnational society in the U.S./Mexico borderlands. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 503 | Epistemologies and Transborder Thought | Examines different approaches to the production and critique of knowledge relevant to transborder social, political, economic, cultural, and institutional structures and processes. The complexity of these structures and processes require transdisciplinary methods of inquiry that go beyond a single set of disciplinary assumptions. Explores the transdisciplinary articulation of theory and method, and considers the strengths and limitations of various approaches and critiques. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 504 | Tools for Transborder Research | Focuses on the selection of methods appropriate for transborder research. Considers the pitfalls of conducting monodisciplinary research in a stratified, differentiated and multicausal world; the most robust methods used in various approaches; the main methodological obstacles to transdisciplinary research; and the challenges of using mixed methodology. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 505 | Theories and Methods of Migration, Health & Applied Social Policy in a Transborder Context | Divided conceptually in three broad analytical areas: (1) migration with an emphasis on demography, (2) health with an emphasis on epidemiology, and (3) public policy analysis. Provides basic training in the application and interpretation of quantitative and qualitative methods and techniques commonly used in researching these areas. Applies these techniques to issues that are specific to the reality of transborder and/or transnational contexts. Students are required to apply and present an analysis in their field of interest which demonstrates their grasp of theory and method. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 506 | Theory and Methods of Transborder Media and Expressive Culture | Overview of the interdisciplinary theories and methods employed to research and analyze media and creative cultural production. Objects of analysis include literature, film, live performance, theater, Web-based media, popular culture production, and visual arts. Required readings elucidate strengths, limitations, and applicability of particular theories and methods to different types of creative expression and media production as well as to their historical and political contexts. Students engage with, critique, and contribute to the theories and methods presented in the course. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 507 | Theory and Methods of Transborder Cultural Acquisition, Language Development, and Learning | This course familiarizes graduate students with literature on relationship between culture, language, and learning, and their theoretical and methodological underpinnings within a transborder context. | N | LEC | N | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 583 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TSS | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-4 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 600 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 601 | Internship in Transborder Studies | Academic internship helps students become full participants in globalized, transnational contexts through a combination of practical experiences in community organizations, readings about transnational life in globalized contexts, reflection, and discussion. | N | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 607 | Colloquium in Transborder Studies | Provide students the opportunity to present their skills, learning, research, and topical interests before an open forum of faculty and students at the beginning of their third year and prior to their dissertation research. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 608 | Transmitting Transborder Studies to Publics and Institutions | Provides students with the most recent advancements in presenting the underlying theory, methods, and techniques in transborder analysis and application. Designed to enter multiple audiences in public, professional, academic, and school settings, course takes advantage of the latest developments in multimedia, print, and electronic technology, film, and print in order to provide systematic and detailed learning opportunities. Provides the basis of developing capacities to create and develop learning modules, and programs on issues of transborder political ecology, economic transformations, cultural development and emergence, literary constructions and projections, and issues of identity, class, and gender. Course is conducted bilingually and makes use of Spanish- and English-language resources. For this reason, it is advisable, but not required, that students are at least conversationally proficient with Spanish and English. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 609 | Prospectus Design in Transborder Studies | Provides doctoral students with the necessary tools to prepare a research proposal that could be submitted as a dissertation prospectus or to a funding agency. Students bring a well-formulated idea of the kind of research they wish to pursue for their dissertation. They also bring a clear idea of the relevant concepts, literature and methods, required to complete the proposal. | N | SEM | N | OPT | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 611 | Comparative and Transborder Perspectives on Learning | This small class emphasizes discussion, presentations by students, and written research papers. Surveys theoretical and methodological aspects related to the use of comparative and transborder perspectives to the study of education. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 612 | The Political Culture of Learning & Change in Transborder Context | Examines a variety of development and learning issues confronting linguistically and culturally diverse groups with an emphasis on immigrant children and families. Includes such topics as: (1) Theoretical foundations and their related impact on organizing interventions for learning and socialization. (2) The intersection of the development of language, culture, and learning in context of linguistic diversity and immigration. (3) The influence and impact of public policy on language minority groups of immigrant backgrounds. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 614 | Bilingualism in Diverse Acquisition and Practicing Contexts | Examines bilingualism, language in society, and languages in contact in transborder contexts and bilingual schooling. | N | SEM | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): PhD student |
| TSS | 615 | Dialectical Inquiry in Transborder Contexts | Introduces the application of dialectical inquiry in value-relevant grounded research methods as a complementary approach to value-free scientific inquiry into practical problems in transborder cultural acquisition, language development, and learning. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Transborder Studies | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 683 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |

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| TSS | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 695 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 700 | Research Methods | Course on research methods in a specific discipline. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 783 | Fieldwork | Structured, supervised field experience in a field science or other discipline requiring experience in field techniques. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | RSC | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | Liberal Arts and Sciences | School of Transborder Studies | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Transborder Studies | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | N | RSC | Y | Z3 | Liberal Arts and Sciences | School of Transborder Studies | 1 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TSS | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Transborder Studies | 1-15 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 301 | Fundamentals of Writing for Digital Media | Foundational concepts and technologies of writing for a variety of digital media. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 347 | Written Communication for Managers | Strategies, techniques and genres for developing and presenting information intended for business and other workplace audiences. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 361 | Writing for Health Care Management | Strategies, formats, and techniques for effective writing and presentation of information for nursing professionals. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102, 105, or 108 with C or better; RN-BSN student. Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 362 | Writing in Health Professions | Focuses on effective communication practices in health-related fields, emphasizing communicating professionally with both scholarly and workplace audiences. In addition to providing a foundation in workplace communication, emphasizes information and technology literacy to help students become proficient in collecting, analyzing, interpreting and synthesizing information using appropriate tools, sources and styles. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; Medical Studies major or Nursing and Health Innovation student. Credit is allowed for only TWC 361 or TWC 362 |
| TWC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 401 | Fundamentals of Technical Communication | Basic information design principles for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres and technical communication tools. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 401 or TWC 501 |
| TWC | 403 | Writing for Professional Publication | Analyzes the market and examines the publication process, including the roles of the author, editor, and reviewer. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 411 | Principles of Visual Communication | Principles and tools of visual communication in print and electronic media, with an emphasis on document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 411 or TWC 511 |
| TWC | 414 | Visualizing Data and Information | Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours. Credit is allowed for only TWC 414 or TWC 494 (Visualizing Information or Information Visualization) or TWC 514 or TWC 598 (Visualizing Information or Information Visualization) |
| TWC | 421 | Principles of Web Authoring | Principles of writing for the Web, including information architecture, accessibility, usability and responsive design. Explores basics of markup language and content management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 421 or TWC 521 |

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| TWC | 422 | Social Media in the Workplace | Analyzes different social media platforms and develops strategies and techniques for effective and appropriate use of social media in the workplace. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TWC 422 or TWC 494 (Social Media in the Workplace) |
| TWC | 431 | Principles of Technical Editing | Principles and techniques of technical editing for print and electronic media, including standards, styles, copyediting, comprehensive editing and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 431 or TWC 531 |
| TWC | 435 | Global Issues in Technical Communication | Helps students understand issues that shape workplace communication in a global environment. Technical communicators are expected to be specialists who interact effectively with a broad range of audiences. Given the global nature of today's workplace, those audiences typically include people from many cultures and countries. Through readings, written assignments, and analysis of case studies, documents, and websites, explores ways in which culture and language shape professional interactions. Also examines other critical issues such as translation, localization, technology and distributed work teams that impact writing and designing documents in a globalized work environment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): minimum 45 hours; Credit is allowed for only TWC 435 or TWC 494 (Global Issues in Technical Communication) |
| TWC | 443 | Grant & Proposal Writing | Develops persuasive strategies and approaches for researching and writing professional funding proposals and grant applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 443 or TWC 543 |
| TWC | 444 | User Experience | Explores principles, techniques and tools of user experience (UX), including user and task analysis, user-centered design and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 444 or TWC 544 |
| TWC | 445 | Content Management and Topic-Based Authoring | Explores concepts, techniques, strategies and technologies for authoring, managing, and publishing reusable content in online documentation, help files and other types of technical communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 445 or TWC 545 |
| TWC | 446 | Technical and Scientific Reports | Explores strategies and techniques for developing informational and analytical reports in a range of genres and for a variety of audiences in scientific and technical fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Prerequisite(s): ENG 102 or 105 or 108 with C or better; minimum 45 hours. Credit is allowed for only TWC 446 or TWC 546 |
| TWC | 451 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws, with emphasis on electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 451 or 551 |
| TWC | 452 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 452 or 552 |
| TWC | 453 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 453 or 553 |
| TWC | 454 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | C | Pre-requisites: ENG 102, 105 or 108 with C or better; Minimum 45 earned hours; Credit is allowed for only TWC 454 or 554 |
| TWC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 490 | Capstone | Development of a professional portfolio, creation of a culminating document, and synthesis of undergraduate experience. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| TWC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | | Prerequisite(s): Barrett Honors student |
| TWC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-6 | L | Prerequisite(s): Barrett Honors student |
| TWC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-3 | | |
| TWC | 501 | Fundamentals of Technical Communication | Basic information design principles for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres and technical communication tools. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 401 or TWC 501 |
| TWC | 504 | Applied Rhetoric and Technical Communication | Foundation in applied and technical communication. Covers the emergence and development of technical communication as a profession and field; rhetorical concepts and their application to technical and applied communication, ethical issues; and the impact of internationalization. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |

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| TWC | 505 | Research in Technical and Applied Communication | Explores the research process and methods appropriate for technical and professional communication. Provides a foundation for understanding the research process; designing and planning valid research within the context of technical and professional communication; collecting and interpreting information, ethical issues related to research; and reporting results. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisite: Degree-seeking graduate student |
| TWC | 511 | Principles of Visual Communication | Principles and tools of visual communication in print and electronic media, with an emphasis on document design, including typography and color. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 411 or 511 |
| TWC | 514 | Visualizing Data and Information | Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 414 or TWC 494 (Information Visualization or Visualizing Information) or TWC 514 or TWC 598 (Information Visualization or Visualizing Information) |
| TWC | 521 | Principles of Web Authoring | Principles of writing for the Web, including information architecture, accessibility, usability and responsive design. Explores basics of markup language and content management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 421 or TWC 521 |
| TWC | 522 | Social Media in the Workplace | Analyzes different social media platforms and develops strategies and techniques for effective and appropriate use of social media in the workplace. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only TWC 422 or TWC 522 |
| TWC | 531 | Principles of Technical Editing | Principles and techniques of technical editing for print and electronic media, including standards, styles, copyediting, comprehensive editing and project management. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 431 or TWC 531 |
| TWC | 535 | Global Issues in Technical Communication | Helps students understand issues that shape workplace communication in a global environment. Technical communicators are expected to be specialists who interact effectively with a broad range of audiences. Given the global nature of today's workplace, those audiences typically include people from many cultures and countries. Through readings, written assignments, and analysis of case studies, documents and Websites, explores ways in which culture and language shape professional interactions. Also examines other critical issues such as translation, localization, technology and distributed work teams that impact writing and designing documents in a globalized work environment. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only TWC 535 or TWC 598 (Global Issues in Technical Communication) |
| TWC | 543 | Grant & Proposal Writing | Develops persuasive strategies and approaches for researching and writing professional funding proposals and grant applications. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 443 or TWC 543 |
| TWC | 544 | User Experience | Explores principles, techniques and tools of user experience (UX), including user and task analysis, user-centered design and usability testing. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 444 or TWC 544 |
| TWC | 545 | Content Management and Topic-Based Authoring | Explores concepts, techniques, strategies and technologies for authoring, managing and publishing reusable content in online documentation, help files and other types of technical communication. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 445 or TWC 545 |
| TWC | 546 | Technical and Scientific Reports | Explores strategies and techniques for developing informational and analytical reports in a range of genres and for a variety of audiences in scientific and technical fields. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate. Credit is allowed for only TWC 446 or TWC 546 |
| TWC | 551 | Copyright and Intellectual Property in the Electronic Age | Explores issues related to copyright and intellectual property laws; emphasizes electronic environment. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 451 or 551 |
| TWC | 552 | Information in the Digital Age | Explores the creation, organization, dissemination, and use of information; the impact of technologies; and surrounding economic, legal, and social issues. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 452 or 552 |
| TWC | 553 | Information and Communications Technology in American History | Explores the historical development of information and related technologies in the United States from colonial times to the present. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 453 or 553 |
| TWC | 554 | Information Technology and Culture | Explores the historical impact and intersection of communications technology and culture in America. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Credit is allowed for only TWC 454 or 554 |
| TWC | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | SEM | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| TWC | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| TWC | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | |
| TWC | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | RSC | Y | Z3 | College of Letters & Sciences | College of Letters and Sciences | 1 | | |
| TWC | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | College of Letters & Sciences | College of Letters and Sciences | 1-4 | | |
| TWC | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | College of Letters & Sciences | College of Letters and Sciences | 1-12 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| UET | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 305 | Introduction to Microelectronics | Quantifies the role of microelectronics technology and its associated skills as drivers for electronics systems development. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisite: Academic Level greater than or equal to Junior |
| UET | 331 | Electronic Materials | Physical, chemical, electromagnetic, and mechanical properties of electronic materials. Solid-state device characteristics and their material properties. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: EST 210; CHM 113; PHY 112 OR Applied Science (Electronic Energy Systems) BAS student |
| UET | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | |
| UET | 411 | Layer Deposition Technology | Fundamentals, applications, and vacuum technology of layer deposition processes used in IC fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit for UET 411 or 511 |
| UET | 416 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: UET 331; Credit is allowed for only UET 416 or 516 |
| UET | 418 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331; Credit is allowed for only UET 418 or 518 |
| UET | 432 | Semiconductor Packaging and Heat Transfer | Packaging theory and techniques; hermetic and plastic assembly; thermal management; electrical characteristics and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: UET 331. Credit is allowed for only UET 432 or 532 |
| UET | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | |
| UET | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | | Prerequisite(s): Barrett Honors student |
| UET | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| UET | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-7 | L | Prerequisites: Fulton Schools of Engineering undergraduate student; Minimum 2.25 GPA; OR Fulton Schools of Engineering graduate student |
| UET | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-3 | | |
| UET | 516 | Dopant Control Technology | Design and practical realization of charge distribution in microelectronic devices, including ion implantation and diffusion processes. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Prerequisites: Graduate status. Credit is allowed for only UET 416 or 516 |
| UET | 518 | Systems on Silicon | Factors that drive integration on silicon, including logic, memory, and interfaces. Economics of system-level solutions. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 418 or 518 |
| UET | 524 | Pattern Transfer Technology | Maskmaking, lithography, and etch processes for integrated circuit fabrication. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 424 or 524 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| UET | 532 | IC Packaging | IC packaging theory and techniques; assembly techniques, material issues; thermal management; electrical performance and reliability. | N | LEC | N | OPT | Ira A. Fulton Engineering | Engineering Programs | 3 | | Pre-requisites: Graduate status; Credit is allowed for only UET 432 or 532 |
| UET | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Grad or Non Degree Grad student; 3.0 GPA or better, OR Senior level; Fulton Polytechnic School undergraduate student; 3.0 GPA or better |
| UET | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UET | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) with a 3.0 GPA or better OR be a Fulton Polytechnic School senior with a 3.0 GPA or better |
| UET | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Ira A. Fulton Engineering | Engineering Programs | 1 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Ira A. Fulton Engineering | Engineering Programs | 1-4 | | Prerequisite(s): Graduate student (degree seeking or nondegree seeking) or Fulton Schools of Engineering senior with minimum 3.0 GPA |
| UET | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | Y | LEC | Y | Z2 | Ira A. Fulton Engineering | Engineering Programs | 1-12 | | Prerequisites: Graduate or Non Degree Students OR Fulton Schools of Engineering undergraduate senior with minimum GPA 3.0 |
| UNI | 101 | Student Success Seminar | Understanding human diversity, perspectives, and values as they relate to student success. Orientation to ASU resources, study skills, and academic and social issues for students. Seminar discussion. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 110 | Critical Reading and Thinking | Prepares students to be successful in college-level academics and helps them improve their critical reading and critical thinking skills. | N | LEC | N | OPT | University College | Dean, University College | 3 | | |
| UNI | 120 | Academic Success | Assists students in creating strategies for success in their academic lives. Students explore personal and academic strengths and barriers that impact success, identify and utilize university resources available to support success at ASU, acquire and enhance academic skills necessary for success in the university, and discover ways to stay on course to meet academic goals. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only ASU 150 or UNI 120 or UNI 194 (Academic Success: Residential, Academic Success: Off-Campus, or Academic Success Seminar) |
| UNI | 150 | Major and Career Exploration | Concepts and skills in the process of selecting a major: self-assessment, research, interviewing, and decision making. Exploration of ASU opportunities and investigation of career options. | N | SEM | N | OPT | University College | Dean, University College | 1 | | |
| UNI | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | GNA | University College | Dean, University College | 1-4 | | |
| UNI | 220 | Academic Refresher | Assists students who find themselves in academic trouble (failed courses, academic probation, disqualification). Students explore the barriers that may be keeping them from reaching their academic goals and acquire tools to overcome those challenges. Topics include self management, self assessment, lifelong learning, and interdependence. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Credit is allowed for only UNI 220 or 294 (Academic Refresher) |

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| UNI | 250 | Choosing a Major | Advanced, one-hour career development course helps students make a thoughtful selection of major and consider the career direction that fits best for them. Students complete advanced assessments of interests, personality, and values; investigate relevant majors and careers, including connecting with working professionals; learn effective decision-making strategies; identify barriers and resources; and make connections to new major department. | N | SEM | Y | OPT | University College | Dean, University College | 1 | | Pre-requisites: UNI 150 Career Exploration with a C or better |
| UNI | 270 | Career Direction for a Successful Future | Actively engages students in their educational and career-planning process by exploring factors that influence personal decision making and planning for the future. Students examine their strengths and personal narrative, identify decision making factors, research career development and a particular career, and develop teamwork skills for the workplace. | N | SEM | N | GNA | University College | Dean, University College | 1 | | Pre-requisite: UNI 250 with C or better; Credit is allowed for only UNI 270 or 294 (Next Steps in Career & Major Exploration) |
| UNI | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| UNI | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | Prerequisite(s): minimum 45 hours |
| UNI | 400 | Society and the Individual | Various social institutions, how they shape the socialization process of a group and individual and give a community meaning, values and a set of norms. Focuses on Arizona as a case study for student research inquiries. | N | LEC | N | GNA | College of Letters & Sciences | College of Letters and Sciences | 3 | L | Pre-requisites: Bachelor of General Studies major; Minimum 2.00 GPA; Minimum 90 hours; Credit is allowed for only UNI 400 or COM 494 (Society and the Individual) |
| UNI | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | University College | Dean, University College | 1-12 | | |
| UNI | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | University College | Dean, University College | 1-4 | | |
| URB | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 220 | Introduction to Urban America | Investigates traditional and evolving forms of civic engagement and management. Examines leadership and organizational models to urban development and decision making. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 240 | Urban Policy | Examines major theories about the purposes and processes of urban policy formulation, adoption, and implementation. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | C | |
| URB | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 300 | Urban and Metropolitan Studies | Examines the city using a multidisciplinary approach drawing from different historical, cultural, social, philosophical, and economic issues and concepts. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Credit is allowed for only URB 100 or 300 |
| URB | 301 | Urban Research | Introduces the philosophy, scope, and methods of urban affairs research. Includes an overview of quantitative and qualitative methods and research design. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 302 | Urban Theory | Examines the sociological, economic, and political theoretical positions underlying the development and evolution of metropolitan areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 305 | Urban Governance | Examines major shifts and trends in urban America. Concentrates on the changing approaches to governance and policies of urban areas. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: Credit for URB 105 or 305 |
| URB | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |
| URB | 400 | Senior Professional Seminar | Demonstrates completion of the urban studies program by synthesizing and applying core knowledge, skills, and abilities to significant urban issues. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | |
| URB | 405 | Citizen Engagement and Community Building | Develops a conceptual, critical, and practical understanding of urban dwellers' involvement in community affairs as citizens and as builders of vital neighborhoods and vibrant cities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 30 hours |
| URB | 406 | Public Administration & Community Development | Critically examines the concepts community and development and considers how important forces such as diversity, civic life, changes in social space, and globalization, affect our understandings about these concepts and influence our actions. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | | Pre-requisite: minimum 30 hours |
| URB | 410 | Building Leadership Skills | Introduces understanding and developing leadership skills, including an examination of leadership theories and models from multidisciplinary and crosscultural points of view, an assessment of the student's leadership capabilities, and practical applications to improve individual leadership capabilities. | N | LEC | N | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 3 | SB | Pre-requisites: minimum 30 hours; Credit is allowed for only URB 410 or PAF 410 |
| URB | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-12 | | |
| URB | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-6 | L | Prerequisite(s): Barrett Honors student |
| URB | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Col of Pub Serv & Comm Solutns | School of Public Affairs | 1-4 | | |

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| USL | 210 | Service Learning: Intro to Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions, and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship, and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | |
| USL | 216 | Service Learning: For Educators | Examines the effects of social justice issues on student achievement. Correlates academic coursework with required community service to analyze community needs, the importance of civic engagement and community issues affecting ethnic minorities and marginalized populations in contemporary American society, particularly how it applies to our education system. Students dedicate a minimum of 70 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services) directly serving high-needs youth or adults. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and social injustices, and how to utilize this knowledge in the teaching profession to better serve all students. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisite: Mary Lou Fulton Teachers College major |
| USL | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| USL | 402 | Service Learning: Education & Youth | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement, and an in-depth study of the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society as they apply to education in Arizona and the United States (policy, student achievement, teacher and administration effectiveness and parental involvement). Students dedicate 100 service hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies), directly serving high-needs youth. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and the importance of civic engagement particularly how it applies to the education system. Provides real-world experiences that exercise advanced academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 hours |
| USL | 410 | Service Learning: Diverse Community Issues | Correlates academic coursework with community service and provides reflection opportunities that examine community needs, the importance of civic engagement and an introduction to the effects of social injustice affecting ethnic minorities and other marginalized populations in contemporary American society. Students dedicate 100 hours at a preapproved site (including Title I K-12 schools, youth programs, health services, social services, environmental programs, government agencies) directly serving a population in need or supporting activities that contribute to the greater good of our community. Weekly seminar, course readings, discussions and reflection assignments facilitate critical thinking and a deeper understanding of cultural diversity, citizenship and how to contribute to positive social change in our community. Provides "real-world" experiences that exercise academic skills and knowledge applicable to each student's program of study and career goals. | N | PRA | Y | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | L & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; 45 minimum hours |
| USL | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-12 | | |

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| USL | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | MaryLouFulton Teachers College | Division of Teacher Preparation | 1-4 | | |
| USL | 496 | Service Learning Capstone | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Applies theory from service learning pedagogy and educational studies to real-world application and academic success. Provides field experience for students to exercise academic knowledge and skills applicable to career experience and program studies. Students must (a) successfully assess a community need in education that correlates to current research and (b) collectively plan a sustainable service project that benefits high-needs children. The student-directed service project addresses social justice issues in education related to corresponding research. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 or 216 |
| USL | 497 | Service Learning Capstone Project | Graded internship that allows students to integrate coursework with a hands-on service learning experience. Implements a sustainable service project addressing social justice issues in education. Student-directed project corresponds to research and planning completed during the previous semester. Provides field experiences for students to implement academic knowledge and skills acquired through the Educational Studies program and to create realistic solutions to national and local community issues that impact student achievement. | N | PRA | N | GNA | MaryLouFulton Teachers College | Division of Teacher Preparation | 3 | | Pre-requisite: USL 210 (216); 410 and 496 |
| VTN | 101 | Elementary Vietnamese I | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | |
| VTN | 102 | Elementary Vietnamese II | Basic skills in modern conversational Vietnamese and development of basic reading and writing skills, with special emphasis on tones. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisites:VTN 101 with C or better |
| VTN | 201 | Intermediate Vietnamese I | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 102 with C or better |
| VTN | 202 | Intermediate Vietnamese II | Improves speaking, listening, reading, and writing competence through dialogues, reading passages, pattern drill, and grammar and communicative exercises. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 5 | G | Pre-requisite: VTN 201 with C or better |
| VTN | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 321 | Advanced Vietnamese and Literature I | Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite : VTN 202 |
| VTN | 322 | Advanced Vietnamese and Literature II | Continuation of VTN 321. Readings from modern, contemporary, and folk literatures as well as current periodicals. | N | LEC | N | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 3 | HU & G | Pre-requisite: VTN 321 |
| VTN | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of International Letters and Cultures | 1-4 | | |
| VTN | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of International Letters and Cultures | 1-3 | | |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0- 460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0- 460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 101 | Introduction to Academic Writing | Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary, and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: ACT English score of 0-18; SAT Verbal score of 0- 460 or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | Department of English | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 107 | Introduction to Academic Writing | For students for whom English is not the native language. Combines classroom and supplemental instruction to teach academic genres of writing, including definition, summary and analysis. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: TOEFL score below 560PBT/220CBT/83iBT; IELTS score below 6.5; ACT English score of 0-18; SAT Verbal score of 0-460; or Accuplacer score of 0-4 (unless test taken prior to May 12, 2009, then score of 0-7) |
| WAC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | Department of English | 1-4 | | |
| WAC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | Department of English | 1-4 | | |
| WPC | 101 | Student Success in Business | Introduces students to resources that help them to succeed in the W. P. Carey School of Business. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WPC | 196 | WPC Domestic Exchange Placeholder | Reserved for undergraduate participants in a W.P. Carey Domestic Exchange program. This placeholder course remains on the student's academic record until the student's record is updated by WPC following the completion of the student's domestic exchange program. This course is then dropped and replaced with the ASU course(s), credit(s), and grade(s) equivalent to the coursework completed during the domestic exchange program. Students must register for at least the number of credits equivalent to full-time study at ASU (i.e., 12 hours during the fall and spring semesters, or 1-6 hours during the summer session). NOTE: This placeholder course is not an indication of the level of coursework or the total number of credits the student may complete during the domestic exchange program. Acceptance to an WPC Domestic Exchange program is required. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1-18 | | |
| WPC | 201 | Business Student Development | Introductory business course for students transferring into the W. P. Carey School of Business. Focuses on ASU resources and developing professionalism. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 1 | | Prerequisite(s): WPC major with 15-44 earned hours. Credit is allowed for only ASU 101 (or equivalent) or WPC 101 or WPC 201 OR 194 (Business Student Development) |
| WPC | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | |
| WPC | 301 | Business Forum | Provides professional program business students with information on careers, interviewing, job hunting, and résumé skills. Must be taken in the first semester of the professional program for business students. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | Pre-requisites: Must be a W.P. Carey degree program business student |
| WPC | 302 | Honors Professional Development | Provides a foundation for developing key professional knowledge and skills required for future business and personal success. Strategic thinking and design, scenario development, verbal and written persuasion, direct marketing techniques, systems thinking, relationship development, research design, and decision-making models. | N | LEC | N | OPT | W.P. Carey School of Business | Prebusiness Office | 1 | | |
| WPC | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Prerequisites: must have a minimum GPA of 2.00; Must have a minimum total earned hours of 56 |
| WPC | 480 | W. P. Carey Capstone Course | Develops a general manager's or business owner's perspective on how organizations can create value. Creating long-run value by repeatedly producing goods and services that customers will buy at prices that cover the costs of producing them is the key to success for business organizations. Analyzing current and future environments to understand threats and opportunities in various institutional settings around the world is the starting point for thinking about how an organization might create value and gain sustainable competitive advantage. Evaluates the impact of institutional settings in different countries and ethical values on decision making. Students learn how to successfully manage relations with key stakeholders including customers, employees, suppliers of capital as well as other component goods and services, and stakeholders from various levels of government in different countries. | N | LEC | N | GNA | W.P. Carey School of Business | Prebusiness Office | 3 | L | Prerequisite(s) with C or better: W.P. Carey BS major; FIN 300 or 302 or 303 (or IEE 300 if Egr Mgt); LES 305; MGT 300 or 303; MKT 300 or 302 or 303; SCM 300 or 303; WPC 301 or 302 (unless SCM/SUS conc deg); Intl Bus course; senior standing |
| WPC | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-12 | | |
| WPC | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | LEC | N | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-6 | L | Prerequisite(s): Barrett Honors student |

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| WPC | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-4 | | Pre-requisites: Must be W. P. Carey BS or BA degree program student; junior or senior standing. |
| WPC | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | W.P. Carey School of Business | Prebusiness Office | 1-6 | | Prerequisite(s): Barrett Honors student |
| WPC | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | LEC | Y | Z1 | W.P. Carey School of Business | Prebusiness Office | 1-3 | | |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 100 | Women, Gender, and Society | Interdisciplinary introduction examining critical issues in women's studies. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Credit is allowed for only WST 100 or WST 300 |
| WST | 191 | First-Year Seminar | Small course emphasizing student-faculty discussion and interaction. Required for first-year students. Must have taken 25 or fewer credit hours. Consulting an academic advisor before enrolling is recommended. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | Pre-requisites: Must be a freshman with 25 or less total earned hours |
| WST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 194 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 220 | Gender, Media and Culture | Introduction to gender and the media including magazines, films, advertising, new media, and other popular culture forms. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (HU or SB) & C | |
| WST | 235 | Disability, Justice and Advocacy | Overarching history of the disability rights movement and how it is similar to and different from other civil and rights movements. Examines how policies and activism are interconnected within this movement, in addition to looking at other human categories related to disabilities such as gender, sexuality, race and socioeconomic status. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Credit is allowed for only COM 235, JUS 235, SST 235, WST 235 or SST 294 (Disability Justice and Advocacy) |
| WST | 270 | Global Perspectives on Women | Through lectures, creative class activities and discussions, presents a comprehensive overview of gender and globalization with special emphasis on lived realities of women worldwide. Understands women's lives and gendered experiences through the issues of work, identities (nationality, race, class, age, ability), bodies and embodiment, belief systems, political economy and difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Credit is allowed for only WST 270 or 294 (Global Perspective on Women) |
| WST | 276 | Wave on Wave: Survey of U.S. Women's Movements | Historical survey of sources influential in the development of the feminist movement in the United States. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H | |
| WST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 294 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 298 | Honors Directed Study | Independent study or practicum under the supervision of a faculty member. | N | RSC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 300 | Women and Gender in Contemporary Society | Advanced interdisciplinary examination of such topics as gender, intersectionality, media and representations, sexuality, politics, health, violence and feminism. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: 30 minimum hours; credit is allowed for only WST 300 or WST 100 |
| WST | 302 | History of Black Women in America | Advanced examination of the challenges that black women have faced historically in America and how they have responded to those challenges socially, politically, economically, and culturally. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & H | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 302 (or AFS 302) or HST 335 or WST 302 |
| WST | 313 | Women and Sexuality | Explores U.S. women's sexuality in social context, including how women's sexuality is portrayed in popular media, medicine and education; how girls learn to think about sexuality; and how public policies address women's sexuality. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 318 | African and African Diaspora Women Writers | An in-depth study of themes such as race, class, gender, and ethnicity in the creative fiction of black women writers of African descent in the United States, the Caribbean, and Africa. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & G | Prerequisite(s): AFR 200 (or AFS 200) or WST 100 or WST 300 or minimum 45 hours; Credit allowed only for AFR 318 (or AFH 318) or WST 318 |
| WST | 320 | Gender, Drugs and Alcohol | Drug and alcohol use have multiple and diverse meanings shaped by their historical, social and cultural context. Examines how and why alcohol and drug use have been identified as social problems and the role of gender in shaping this process. Reviews multiple social and cultural aspects of gender, drug and alcohol use, as well as the emergence of gender-based health disparities within this context. Fulfills a science and society requirement. Basic scientific principles such as the formulation of research questions, data collection and analysis, have been used to develop our understanding of gender, drugs and alcohol. How society influences the nature of those questions, the perceived value attached to particular scientific studies over others, and how to critically evaluate law and policy around drugs and alcohol in light of those studies. | N | LEC | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 30 hours; Credit is allowed for only WST 320 or WST 394 (Gender, Drugs and Alcohol) |
| WST | 330 | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | 330 | Women, Film, and Culture | Critical examination of the way films can reflect, reinforce or challenge mainstream cultural ideas about women. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours |
| WST | 331 | Asian Pacific American Genders and Sexualities | Explores gender and sexuality issues as they relate to Asian Pacific American experiences, including interracial relationships, stereotypes, feminism, queer theory. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Credit is allowed for only APA 330 or WST 331 |
| WST | 333 | Critical Perspectives on Sexuality | Examines critical theories of sexuality, including history, commerce, pleasure, LGBT issues, identity, medicalization of sexuality, disorders, sex crime, and pornography. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 335 | Lost in Space: Gender, Race, and Sexuality in Science Fiction | Surveys the complex interrelationships of biomedical research and discourses of biological difference as reflected in science fiction. Explores such questions as: How have biological scientists explained human differences along axes of gender, race, class, sexuality? In what ways have these scientific discussions manifested themselves in science fiction? | N | LEC | N | GNA | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 30 hours; Credit is allowed for only APA 394 (Science Fiction Adventures Race/Gender) or WST 335 or WST 394 (Lost in Space: Gender, Race, & Sexuality in Sci Fi) |
| WST | 340 | Gender, Science, and Technology | In-depth examination of the complex interrelationships of gender, science, technology, and society in a number of different contexts. Looks at the participation of women in scientific and technical fields both historically and cross-culturally, and addresses such topics as: gender segregation by status and discipline, feminist theories of gender and science, the conditions under which women have succeeded in the sciences, gender and biological determinism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 345 | Gender, Religion, and Global Violence | In-depth study of forms of gendered violence in which religion plays a key role in either the practice or perpetuation of that form of violence in a myriad of cultures and contexts. Analyzes current responses and proposes new approaches to combating or redefining these forms of violence, emphasizing the need to understand and respect the religious and cultural contexts in which these actions occur. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Pre-requisites: WST 100, 300 or minimum 30 hours |
| WST | 360 | Women as Healers | Advanced examination of the role of women as caregivers, healers, physicians, midwives, and nurses in different cultures and historical periods. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 364 | Unruly Voices: Black Women and Cultural Narratives | In-depth study of African American women writers and how they (re)define female identities and engage a critical cross-cultural dialogue within the context of cultural history in the United States. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Prerequisite(s): AFR 200 (or AFS 200) or minimum 45 earned hours; Credit is allowed for only AFR 365 (or AFH364) or WST 364 |
| WST | 365 | Women and International Health | Advanced study of gender-based disparities and global health, including impact of poverty, gender discrimination, political economy, and culture. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | G | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 370 | Chronicling Women's Lives | Explores the lives of a selected group of American women as a point of departure for the chronicling of contemporary women's lives. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 371 | Sex and the City: Women, Sexuality, and Popular Culture | An in-depth study of the changing media representations of young, sexually autonomous women in the city. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 372 | Women in Judaism | Studies the legal, social, and cultural status of Jewish women in various historical and contemporary societies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better and minimum 24 earned hours or WST 100 or 300 with C or better; Credit is allowed for only JST 373, REL 373 or WST 372 |
| WST | 373 | Latina/Chicana Issues | Critical examination of the roles Mexican American, Chicana, and/or Latina immigrant women play historically, socially, and politically in the United States and along the border. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 30 hours. Credit is allowed for only TCL 373 or WST 373 |

| Subject | Catalog Nbr | Course Title | Course Description | Allow Mult Enroll | Component Primary | Crse Repeatable | Grading Basis | College | Department | Units | General Studies | Requirements |
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| WST | 374 | Desperate Housewives | In-depth examination of the representations of women as wives and/or mothers in the popular discourse from the 20th century to current day through an analysis of various forms of popular culture such as film, magazines, popular writing and television. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Minimum 30 hours; Credit is allowed for only WST 374 or 394 (Desp Housewives: Gender, Family & Pop Culture) |
| WST | 375 | Women and Social Change | In-depth course on feminist activism and social change. Combines research and theory on a contemporary social problem with a community action experience. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 376 | Feminist Theory | Explores feminist theories and the intersection of gender, race, ethnicity, and class through critical analyses. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | H & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 377 | History of American Feminist Thought | Critical analysis of the origins and development of American feminist thought and political movements. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | H & C | Prerequisite(s): WST 100 (or WST 300) or minimum 30 hours |
| WST | 378 | Global Feminist Theory | In-depth studies of global feminist theories and exploration of the intersections of gender, race, ethnicity, class, and nation through critical analysis. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | L & C & G | Pre-requisites: WST 100 or 300 or minimum 30 hours |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | College of Letters & Sciences | College of Letters and Sciences | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 380 | Race, Gender, and Class | In depth examination of how social inequalities are reproduced and perpetuated. Explores the intersections of race, class, and gender in culture and society | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisite: WST 100 (or WST 300) or minimum 30 hours |
| WST | 382 | American Indian Women | Investigate the economic, political and ideological factors contributing to American Indian women's intellectual and creative activities. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | C | Pre-requisites: WST 100, 300, or AIS 180 with a C or better; or co-requisite if completed 30 hours or more: AIS 180, or WST 100 or 300. Credit for only AIS 381 or WST 382 |
| WST | 385 | Psychology of Gender | Examines, from a psychological perspective, the similarities and differences in beliefs, attitudes, and behaviors of women and men. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: WST 100 or 300 with C or better |
| WST | 390 | Women and Religion | Role of women in religious traditions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex roles within specific religions. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Prerequisite(s): ENG 102, 105, or 108 with C or better; Credit is allowed for only REL 390 or WST 390 |
| WST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 394 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | 410 | Poverty, Social Justice, and Global Health | From perspectives of anthropology and allied fields, explores critical, social justice, and ethical issues in health care, research, and disparities. Focuses on vulnerable and special populations. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | (L or SB) & G | Prerequisite(s): ENG 101, 105, 107, or 111 with C or better; Credit is allowed for only ASB 410 or SSH 400 or WST 410 or JHR 598 (Poverty, Social Justice, & Global Health) or MAS 598 (Poverty, Social Justice, & Global Health) |
| WST | 413 | Queer Studies | In depth exploration of lesbian, gay, bisexual, transgender, and queer experiences in the U.S. and globally, from an interdisciplinary perspective. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better or minimum 45 hours |
| WST | 420 | Women of Color in Film | An in-depth analysis of the history and representations of women of color in film and the film industry through the intersections of gender, race, sexuality, class, and nationalism. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours; Credit is allowed for only AFR 418 (or AFS 420) or FMP 420 or FMS 420 or WST 420 |
| WST | 421 | Girlhood and Adolescence | Critical analysis of the changing construction of girlhood and female adolescence through history, memoir, fiction, myth, music, and media. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisite: WST 100 or WST 300 or minimum 30 hours |
| WST | 422 | Women, Law and Social Control | Examines social, economic, and legal factors that are relevant to mechanisms of social control of women, including formal legal control and informal control through violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: ENG 102, 105 or 108 with C or better; minimum 36 hours; Minimum 2.00 GPA; Credit is allowed for only JUS 422 or WST 422 |
| WST | 430 | Gender on the Borderlands | Examines women's status in the U.S.-Mexico borderlands through key issues such as migration, labor, violence, education, and culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better; Credit is allowed for only JHR 598 (Gender on the Borderlands) or WST 430 |
| WST | 440 | Politics of Women's Health | In-depth and interdisciplinary exploration of how women's social, cultural, and economic position affect their health and health care. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 444 | Gender, Health, and Bodies | Explores gender and health from a feminist perspective, including critical analyses of medicine, science, and popular culture. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB | Pre-requisites: WST 100 or 300 with C or better; Credit is allowed for only MAS 598 (Gender, Health, and Bodies) or WST 444 |
| WST | 447 | Gender, Culture, and Development | In-depth analysis of gender roles related to health, family, work, education and politics in developing countries. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | (L or SB) & G | Prerequisite(s): WST 100 or 300 or minimum 45 hours; Credit is allowed for only SGS 454 or SOS 447 or TCL 447 or WST 447 or TCL 598 (Gender, Culture & Development) |

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| WST | 449 | Hate Speech, Manifestos, and Radical Writings | Examines writings, speeches and texts that provoke radical or even revolutionary social change. At its core, this course asks: What is the radical and what does it do? How do radical writings function as texts, speech acts, inspirational documents, testimonies, accounts of madness, frightening moments, calls to arms, peacekeeping entities or speaking truth to power? Examines injurious speech and provocative writings that span a range of social movements and topics, including radical feminism, radical queer, Black power, indigenous rights, art and performance, anti-technology, animal rights, violence, madness and revolutionary resistance. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 35 hours; Minimum 2.50 GPA; Credit is allowed for only WST 394 (Hate Speech and Manifestos) or WST 449 |
| WST | 457 | Women, Cultures, and Societies | Examines issues such as poverty, dependency, interdependency, race, class, and gender in different societies of the world. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 460 | Women and the Body | In-depth analysis of the cultural construction of the gendered body and societal prescriptions about beauty, body image, and size. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisite: WST 100 or WST 300 or minimum 45 hours |
| WST | 467 | Ethnic Women Writers | Concentrates on selected women writers of the U.S. who are Native American, African American, Latina, and Asian-American. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & C | Prerequisite(s): WST 100 (or WST 300) with C or better. Credit is allowed for only ENG 460 or WST 467 |
| WST | 470 | Gender and Popular Culture | Advanced interdisciplinary examination of how gender is constructed in various popular cultural forms such as film, television, magazines, and music. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 471 | Women's International Human Rights | In-depth study of the core themes of a global movement for women's international human rights. Analyzes the historical evolution of the development of international human rights and women's rights within the United Nations and regional human rights systems. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): WST 100 or WST 300 or minimum 45 hours. Credit is allowed for only AFR 470 (or AFS 470) or AFR 494 (or AFS 494) (Women's International Human Rights) or AFR 598 (or AFS 598) (Women's International Human Rights) or WST 471 |
| WST | 472 | Women, Aging, and the Life Course | Critical evaluation of issues affecting women as they age, including media messages, cultural differences, economic issues, and relationships. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | | Pre-requisites: Minimum 60 hours (including 6 hours of PSY and/or SOC). |
| WST | 473 | Indigenous and Latina/Chicana Representation | Examines from an interdisciplinary perspective contemporary issues experienced by Indigenous and Chicana/Latina women in the U.S. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Prerequisite(s): ENG 102, 105 or 108 with C or better; minimum 45 hours |
| WST | 475 | Women of the Diaspora across Cultures | Examines the socioeconomic condition, political formation, and identities of contemporary indigenous, ethnic minority, immigrant, and migrant women globally. | N | LEC | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU | |
| WST | 477 | Women and Violence | Critical examination of forms of violence against women globally at individual, institutional, and cultural levels. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | SB & C | Pre-requisites: WST 100 or WST 300 or minimum 45 hours |
| WST | 480 | Gender Issues in Education | Examines the relationship between gender and educational access and outcomes as a result of public policy in a variety of communities and settings. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 483 | Women Writers Across Cultures | Comparative approach to contemporary writings by women from around the world. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | HU & G | Pre-requisites: WST 100 or 300 with C or better |
| WST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 484 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 485 | Women, Gender, and Leadership | Explores the gendered nature of leadership and studies strategies that enable women to lead successfully in areas such as business, education, and public service. | N | SEM | N | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 3 | SB & C | Pre-requisites: WST 100 or 300 with C or better |
| WST | 490 | Transborder Queer Performativity | Explores a rich and diverse body of border-crossing performative expression created by queer and/or Latina/o artists. Course readings and discussions include solo and collaborative works with an emphasis on solo autobiographical performance scripts as well as performer interviews and performance scholarship. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | HU & C | Pre-requisites: ENG 102 (or 105 or 108) with C or better; Minimum 45 earned hours; Credit is allowed for only TCL 490 or WST 490 |
| WST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 492 | Honors Directed Study | Independent study in which a student, under the supervision of a faculty member, conducts research or creative work that is expected to lead to an undergraduate honors thesis or creative project. | N | RSC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | 493 | Honors Thesis | Supervised research or creative activity focused on preparation and completion of an undergraduate honors thesis or creative project. | N | RSC | N | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | L | Prerequisite(s): Barrett Honors student |
| WST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 494 | Special Topics | Covers topics of immediate or special interest to a faculty member and students. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |

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| WST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 497 | Honors Colloquium | A class emphasizing discussion, written and/or oral presentation by students, and active participation. | N | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-6 | | Prerequisite(s): Barrett Honors student |
| WST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | 498 | Pro-Seminar | Small-group study and research for advanced students within their majors. Major status in the department or instructor approval is required. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-7 | L | Pre-requisites: WST 100 or 300 with C or better; ENG 101 or ENG 107 or ENG 105; Majors only |
| WST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | Liberal Arts and Sciences | School of Social Transformation | 1-3 | | |
| WST | 499 | Individualized Instruction | Provides an opportunity for original study or investigation in the major or field of specialization on an individual and more autonomous basis. Neither a substitute for a catalog course nor a means of taking a catalog course on an individual basis. Requires application well in advance of regular registration with the student's advisor, the advisor's signature, and approval by both the instructor with whom the student will work and the chair of the department offering the course. | Y | IND | Y | GNA | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-3 | | |
| WST | 501 | Foundations of Feminist Thought | Provides key concepts and theories that have shaped the field of women and gender studies. Also provides overview of resources for research in women's studies scholarship at ASU and prepares students to participate in the field. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only WST 501 or WST 691 (Foundations of Fem Thought) |
| WST | 502 | Interdisciplinary Gender Research Methods | Describes the ways in which feminist scholars conceptualize and design their research. Explores the decisions scholars make in their research including the choice of research topics, applications of feminist theories and methodologies, the choice of methods and how and why feminist scholars have increasingly incorporated interdisciplinary methods, and what is at stake in these decisions for the research design and research outcomes. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student |
| WST | 547 | Gender, Activism, and the Built Environment | Explores issues of gender in the built environment. Includes traditional attitudes toward gender underlying the physical form and continuing impacts. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Graduate student (degree seeking or nondegree seeking) ; Credit is allowed for only PUP 547 or WST 547 |
| WST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 580 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 584 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 590 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 591 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: degree-seeking graduate students only |
| WST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 592 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | LEC | Y | Z1 | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-12 | | |
| WST | 593 | Applied Project | Preparation of a supervised applied project that is a graduation requirement in some professional majors. | Y | LEC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |

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| WST | 594 | Conference and Workshop | Topical instruction, usually in compressed format, leading to academic credit. Often offered off campus to groups of professionals. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 595 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | LEC | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| WST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-4 | | |
| WST | 598 | Special Topics | Topical courses not offered in regular course rotation-- e.g., new courses not in the catalog, courses by visiting faculty, courses on timely topics, highly specialized courses responding to unique student demand. | Y | LEC | Y | OPT | New Interdis Arts & Sciences | School of Humanities, Arts, and Cultural Studies | 1-4 | | |
| WST | 599 | Thesis | Supervised research focused on preparation of thesis, including literature review, research, data collection and analysis, and writing. | N | LEC | N | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 601 | Critical Concepts of Gender | Key concepts, theoretical frameworks, disciplinary and interdisciplinary approaches, and the critical debates that have shaped the field of gender studies. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: degree-seeking graduate students only |
| WST | 602 | Mapping the Intersections of Gender | Theoretical concepts, metaphors, and frameworks employed by feminist scholars to understand the way gender articulates with other categories of difference. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 603 | Engendering Methodology | Focuses on the methodologies, epistemologies, and ethical dilemmas of researching gender. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 615 | Masculinities | Explores the theoretical concepts, frameworks and disciplinary and interdisciplinary approaches that have accompanied the emerging analysis of masculinity studies as a field. Interrogates the ways in which masculinities have been defined in relation to femininities and other institutionalized constructions of difference, and how these definitions have contributed to material conditions and specific socio-historical contexts in which gendered bodies are included or excluded, privileged or disadvantaged, taken for granted or contested. Considers the articulations and contestations of diverse masculinities as expressed through gender, race, sex, ethnicity, sexuality, kinship, politics, popular culture, economics, nationalism, science and medicine, and violence. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only WST 615 or WST 691 (Masculinities) |
| WST | 620 | Advanced Feminist Theory in a Transnational Context | Concentrates on transnational feminist theory and its intersections with queer theory, postcolonial theory, and critical race theory. Also looks at the ways in which (or indeed, whether) academic discourses have anything useful to say about the worlds in which we live. Among the questions we'll need to have constantly in our minds are: In what ways has feminist theorizing changed over time? Does transnational feminist theory challenge or even undermine previous feminist theoretical discussions or the perspectives you might be familiar with from your undergraduate days? What kinds of engagements do our authors have with theorists in other areas (queer studies, postcolonial studies, critical race theory)? Can you discern any sort of new feminist grand narrative emerging from these works? In what ways might our authors' perspectives help you conceptualize and contextualize your own work? | N | SEM | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Prerequisite(s): degree- or nondegree-seeking graduate student; Credit is allowed for only WST 620 or WST 691 (Feminist Theory) or WST 791 (Feminist Theory) |
| WST | 640 | Visual and Narrative Culture | Feminist analysis of gender representations in visual and narrative culture, including film, dramatic literature, fiction, and autobiography. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 684 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 690 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 691 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 692 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a thesis or dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |

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| WST | 701 | Research Design and Proposal Development in Gender Studies | Prepares students for careers in gender studies by developing skills in research design, proposal writing, and identifying funding outlets. | N | LEC | N | OPT | Liberal Arts and Sciences | School of Social Transformation | 3 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 780 | Practicum | Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely. | Y | PRA | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 784 | Internship | Structured practical experience following a contract or plan, supervised by faculty and practitioners. | Y | PRA | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 790 | Reading and Conference | Independent study in which a student meets regularly with a faculty member to discuss assignments. Course may include such assignments as intensive reading in a specialized area, writing a synthesis of literature on a specified topic, or writing a literature review of a topic. | Y | IND | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | |
| WST | 791 | Seminar | A small class emphasizing discussion, presentations by students, and written research papers. | Y | LEC | Y | OPT | Liberal Arts and Sciences | School of Social Transformation | 1-12 | | Pre-requisites: Degree-seeking graduate students only |
| WST | 792 | Research | Independent study in which a student, under the supervision of a faculty member, conducts research that is expected to lead to a specific project such as a dissertation, report, or publication. Assignments might include data collection, experimental work, data analysis, or preparation of a manuscript. | Y | RSC | Y | Z1 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |
| WST | 795 | Continuing Registration | Used in situations where registration is necessary but where credit is not needed. Replaces arbitrary enrollment in reading and conference, research, thesis, dissertation, etc. Used by students when taking comprehensive examinations, defending theses or dissertations, or fulfilling the continuous enrollment requirement in doctoral programs. Credit is not awarded, and no grade is assigned. | Y | IND | Y | Z3 | Liberal Arts and Sciences | School of Social Transformation | 1 | | |
| WST | 799 | Dissertation | Supervised research focused on preparation of dissertation, including literature review, research, data collection and analysis, and writing. | Y | RSC | Y | Z2 | Liberal Arts and Sciences | School of Social Transformation | 1-15 | | |